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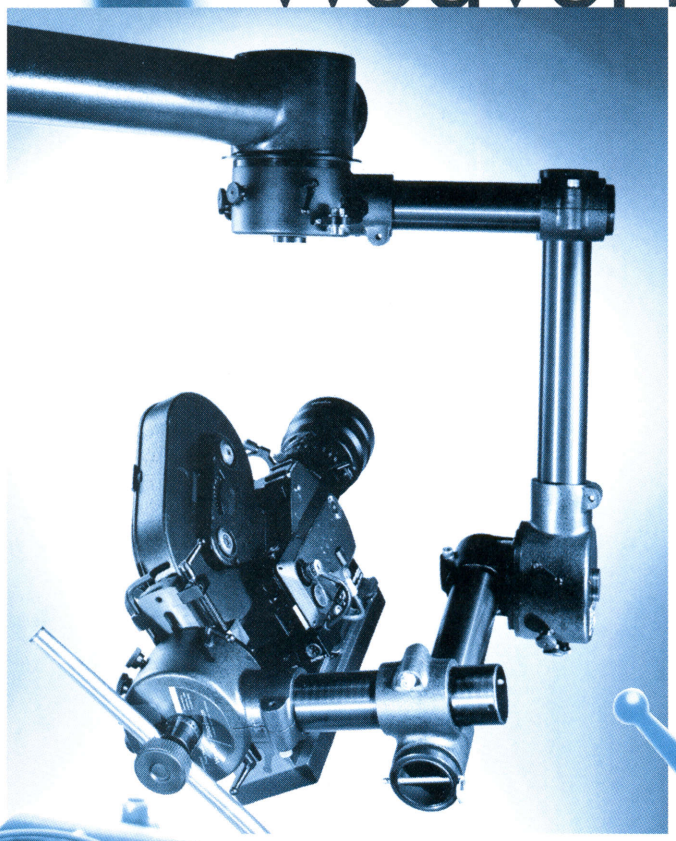

The International Journal of Film and Electronic Production Techniques

January 1996 Vol. 77 No. 1

American Cinematographer

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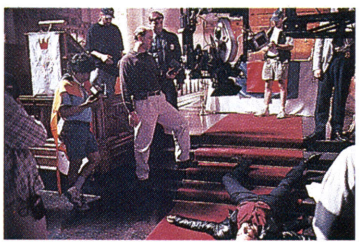

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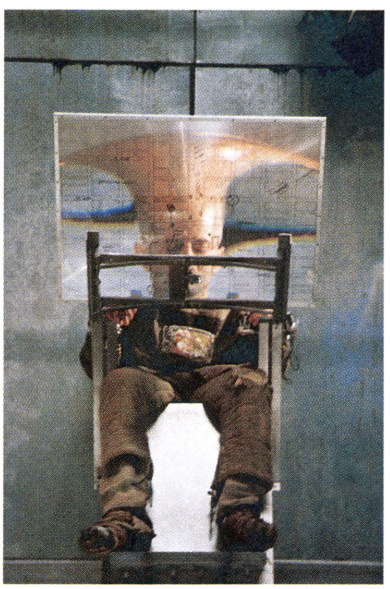

On Our Cover:
A time-traveling convict named Cole (Bruce Willis) has a series of bizarre adventures in *Twelve Monkeys* (photo by production designer Jefferey Beecroft)..

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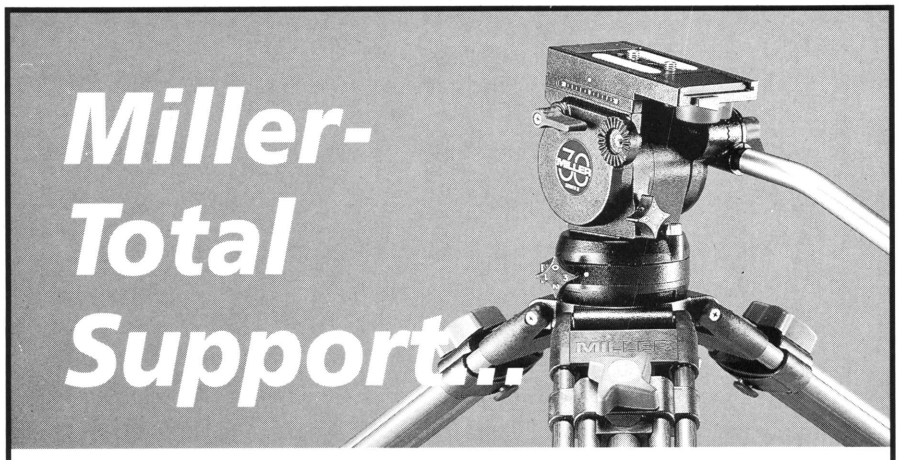

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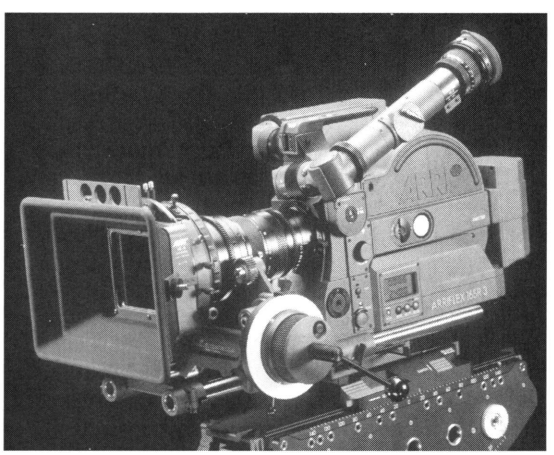

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THROUGH THE EYES OF PHEDON PAPAMICHAEL
Cinematographer Phedon Papamichael has shot numerous features, including *While You Were Sleeping, Unstrung Heroes,* and *Unhook the Stars.*
Photo: Michael Bulbenko. Film: Fuji Professional Neopan 400.

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Screwing around

So people have traditionally used up to three 40.5mm round filters inside the backs of the long Canons and Nikons. That means taking the lens off the camera, reaching inside, screwing and unscrewing. *Too slow*, especially when the sun's going down.

Fast filter mounting, three rotating stages

Using the screw-ins has also meant you couldn't position grads or polarizers. To make that possible, and to save time, we designed our telephoto filter system. It lets you mount up to three rotating filters at the back, without removing the lens.

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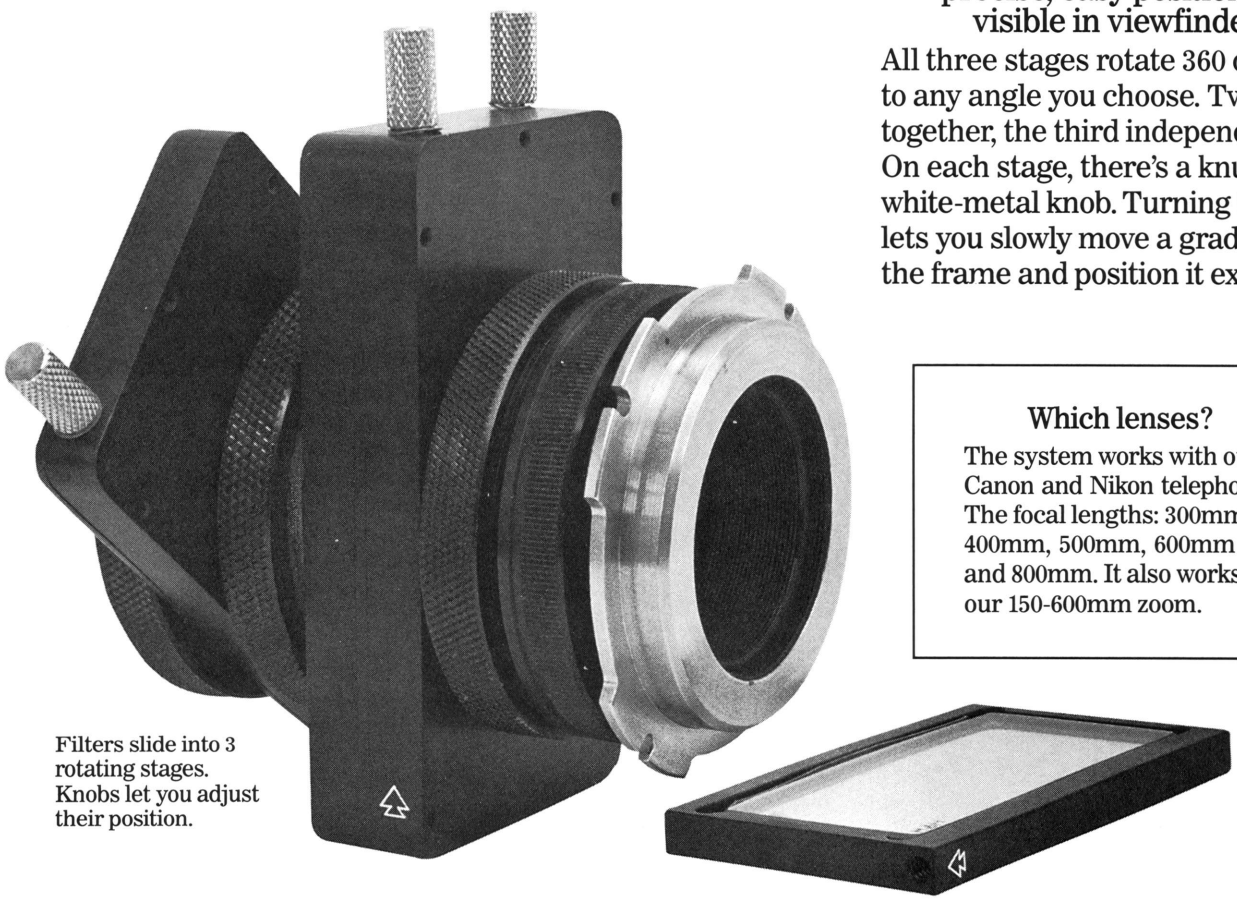
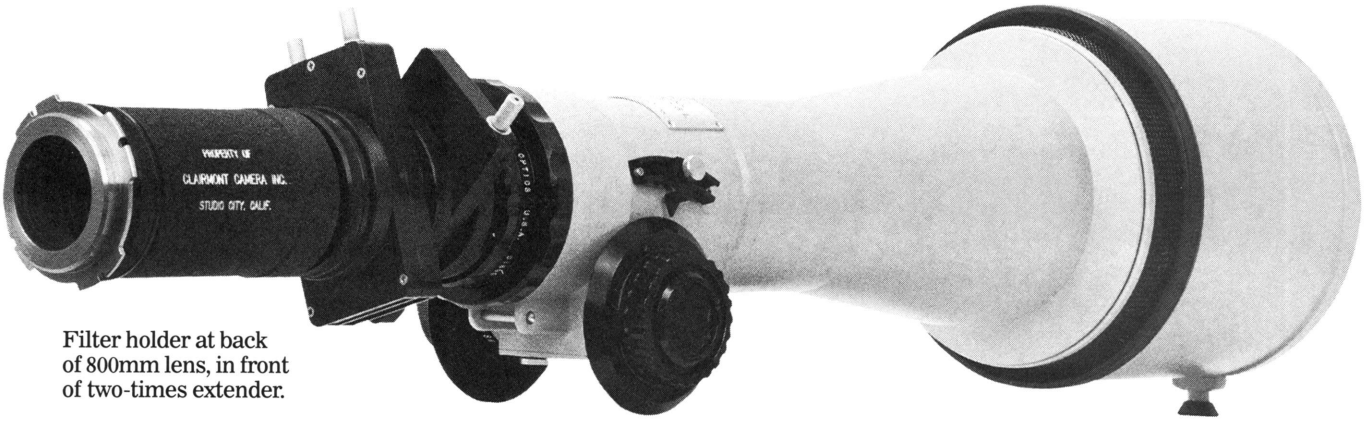
All three stages rotate 360 degrees, to any angle you choose. Two rotate together, the third independently. On each stage, there's a knurled white-metal knob. Turning the knob lets you slowly move a grad across the frame and position it exactly.



Filters slide into 3 rotating stages. Knobs let you adjust their position.

Which lenses?

The system works with our Canon and Nikon telephotos. The focal lengths: 300mm, 400mm, 500mm, 600mm and 800mm. It also works on our 150-600mm zoom.



Filter holder at back of 800mm lens, in front of two-times extender.

We've had 408 different types of 2x3 inch filter made just for this system, including 87 different color grads

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The filters measure 2x3 inches. They're custom made to our specs by Harrison, Tiffen and the other principal makers. Each filter comes in its own rectangular metal tray, so you can handle it without touching the glass. The trays slide right into the filter holder— arrows show the right direction.

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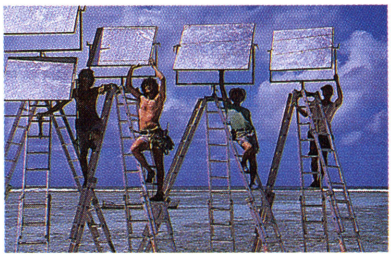


A Thanks for Inspiration

While preparing to shoot a Bacardi Rum commercial on a tiny island in the Seychelles, quite far from civilization, we were frantically looking for a solution for lighting the set — a tropical hut built 15 feet up on the rocks with the incoming waves breaking underneath — from the direction of the water.

To have the light in the right direction, director of photography Dieter Deventer had to set up the lights, sunboards and bouncing overheads in the sand, in the path of a strong wind and five-foot waves (see photo above).

Just at the right moment, I saw in *AC's* March '95 issue the picture of Bobby Huber's fast-deploying [ladderpod] device used on *Legends of the Fall.* This seemed to me the one and only way to rig our stuff, and it did a great job!

— Thomas von Klier, Gaffer
Berlin, Germany

For the Record

In a historical piece on *Foreign Correspondent* (*AC* August) I stated that the scene in which the actors appear in the portholes of a miniature aircraft was accomplished via miniature projection. A letter from film editor and historian Rick Mitchell reports that it was actually "an optical involving rotoscoped mattes of the type regularly being done by John Fulton, ASC and his staff at Universal at the time." A closer examination of the film convinces me that Rick is correct in this assessment.

— George Turner
AC Contributing Editor, Historicals
Pasadena, CA

Documentary's Loss

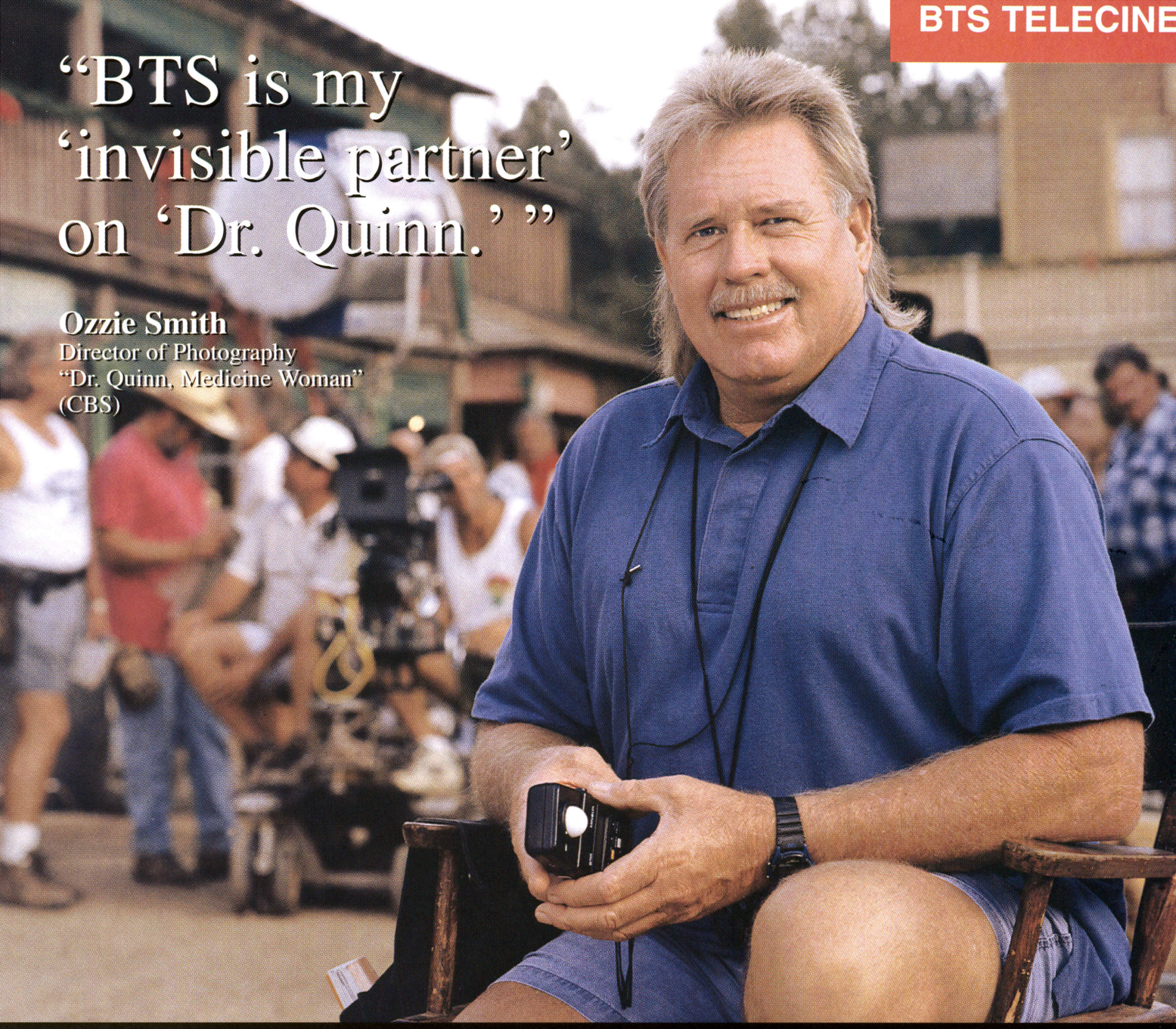
AC *is sad to report that documentary filmmaker Mike Shea died August 29, 1995 in a helicopter crash while filming a music video for rock singer Meat Loaf. In 1961 Shea gave up an established freelance photographer career — his work appeared regularly in* Life Magazine, Time, Fortune, Ebony *and* Playboy — *and joined the vanguard of photojournalists who were creating the cinema verité documentary movement. At the time of his death, Shea's groundbreaking 1964 blues documentary* Maxwell Street *was being prepared for re-release on video. In 1965, he helped form the Film Group in Chicago, the studio on which his partner, Mike Gray, based the screenplay for* The China Syndrome.

Shea moved to Los Angeles in 1971, where he worked as a director of photography and cameraman on more than 50 films, most recently for director Hal Needham.

Shea's first news photographs were published in the Chicago Herald American *and the* Sun Times *in the Forties, while he was still a teenager. Addicted to the police beat, he never bothered to finish high school, but his work would take him all over the world. Like his early coverage of the Civil Rights movement, some of which appeared in the PBS documentary* Eyes on the Prize, *his later works reflected a working-class Irish regard for the ordinary man.*

Shea taught filmmaking at the Chicago Art Institute, and helped dozens of former students and assistants up the ladder in Hollywood. Cinematographer Steven Poster, ASC recalled Shea's generosity: "He never turned anybody down. He would give you absolutely anything he had except his french fries." Gordon Quinn, producer of Hoop Dreams, *began his career as one of Shea's assistants, as did* Kids *director Larry Clark and Academy Award-winning documentarians Alan and Susan Raymond.*

"BTS is my 'invisible partner' on 'Dr. Quinn.' "



Ozzie Smith
Director of Photography
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(CBS)

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"Dr. Quinn" is transferred at Digital Magic, a full-service digital post-production facility in Santa Monica, Calif.

Can We Save the Shot?

by John Bailey, ASC

What has happened to the value of the film "shot"? It seems to me that if much of recent Hollywood studio product is used as a measure, not only has the individual shot become more debased in content, awash in smoke and violence, but its literal currency as an aesthetic benchmark has suffered hyper-inflation.

This year there seems to be little demarcation between the storyline and content of the "fun" summer action movies and the onset of the autumn "serious" movies. Does the current release of so many hard-action movies portend a cinematic Endless Summer of special effects and mayhem? Are we about to imbibe a draught of year-round movie hemlock, poisoning whatever residue of pure blood that may still course through the enfeebled corpus of cinema? The word "cinema" itself seems in danger of becoming a term of approbation, a coded sign for "non-commercial."

But box office is Box Office, and there is no doubt for any of us why the industry makes movies. As the conglomerates continue to feed on each other in ever-larger mergers and the studios establish marketing venues for product with retail outlets on Fifth Avenue, the diversity of film suffers content starvation akin to that of a vegetarian trapped in a Nebraska feedlot.

I recently saw a film called *Persuasion* that must be the antithesis of what we are churning out at the studios. It's not that it is a great film, but it *is* a very well-crafted and compelling rendering of Jane Austen's last novel. It is about character and behavior. It is quiet and deceptive, nuanced in its slow build of empathy and involvement, unhurried and stately. It is utterly trusting of the intelligence and maturity of the audience. I can't conceive of a film of its subtlety being made inside the American studio system. And exactly to the point here, it has respect verging on reverence for the shot. I don't mean to suggest that *Persuasion* is "cinematic" in its exploitation of the power of camera movement, composition or light. In fact it is quite simple, even unobtrusive, in its imagemaking. And this, I think, is what we as filmmakers in Hollywood are in danger of losing. Like the mighty dollar, once the standard of world currency and now soon to be just another coin to buy a can of soda with, the shot is becoming a very cheap unit of value.

As cinematographers, for us the individual shot is an icon, an aesthetic object in itself — a portrait, a landscape, a singular moment into which we pour our talent and art. Each shot has significance. Each shot demands a constant renewal and re-evaluation of a series of artistic choices that we hope will find a place in the mosaic of the film. All day long on the set we follow the process of selecting, from an infinite number of possibilities, the very finite and precise elements that make a shot, then the series of shots that make a scene, with these scenes linked into sequences that make up the full film. But there is always the primacy and the immediacy of the individual shot.

What happens to the shot after it is screened in dailies is inevitable. Its singularity disappears as it is incorporated by the editor into the fabric of the whole film. That is, after all, the end for which we created it. Otherwise we would all be still photographers. But the issue I want to address is one of point of view. And the point of view I wish to avow is that of the cinematographer.

Many colleagues have confessed to me recently that they feel less like artists incrementally creating the shots which constitute a film, and more like laborers supplying raw data that may assume god-knows-what configuration in the editing room. (In our post-Kem age of electronic non-linear editing, the editor doesn't even have to handle cumbersome rolls of film. We digitize dailies, further removing the editing process from the concept of the film shot.) Many editors have told me they find it so easy to access and manipulate shots on the Avid or Lightworks that the traditional critical evaluation process itself is altered. It can be more tempting to quickly assemble multiple versions of a scene rather than endure the very time-intensive process of re-working a single one. A collateral pitfall is the ease with which the producers, studio executives and stars can be cutting simultaneous versions of the film. (The director's cut, after the DGA-contracted 10 weeks, becomes just another version.)

In a way, I am calling up here the old dichotomy of the French New Wave, that of mise-en-scene versus montage. One of the hallmarks of the New Wave was a conviction of the primacy of the shot, of the shape and flow and content of each shot under the control and shaping eye of the director. This is part of the basis of the *auteur* theory.

And it is to this end that the director "places in scene" the actors and camera in a choreographed dance. Form and content merge. Style does not supersede content but explicates and realizes it. The director in France of the Sixties was called a "realisateur." And in this mix the cinematographer is key. In Europe there has always been a strong tradition of director-cinematographer partnership: Godard-Coutard, Truffaut-Almendros, Bergman-Nykvist, Bresson-Lhomme, Chabrol-Rabier, Fellini-Rotunno, Bertolucci-Storaro. The list makes a Hollywood cinematographer like me salivate. Such partnerships in American cinema are the exception rather than the norm. American cinema has had remarkable collaborations from its inception (Griffith-Bitzer, Hitchcock-Burks, Allen-Willis, Spielberg-Daviau), but few of them have had the career-long continuity we more often find abroad. The market-driven dictates of the American system are not very congenial to such relationships. Also, too often the cinematographer seems to disappear after completion of principal photography and further input is neither sought nor desired. Many cinematographers complain that they have to struggle for answer-print involvement, much less approval.

Because of the process of shot collaboration between directors and cinematographers who work in the foreign tradition, the inherent value of the shot itself remains great. It is not uncommon in European cinema to see films where each shot flows into the next, with little double cutting — coverage quite different from the American style, in that there is often no master at all. The reductive and elemental visual vocabulary of master, two-shot, over-the-shoulder, etc., which is perceived to be the traditional American style, often works very much to the disadvantage of the

cinematographer. It reinforces the belief that shots are data and are interchangeable. Style and dramatic focus are to be determined only in the editing room. (And increasingly, in an era of first-time, one-time directors, the studio becomes auteur.)

No one can deny the efficacy or the magic, even the salvation of the editing process. We have surely been caught more than once wishing for a piece of static coverage rather than an elaborate dolly shot that seemed so right when it was made. But the distinction I want to explain here is, in fact, a substantive one.

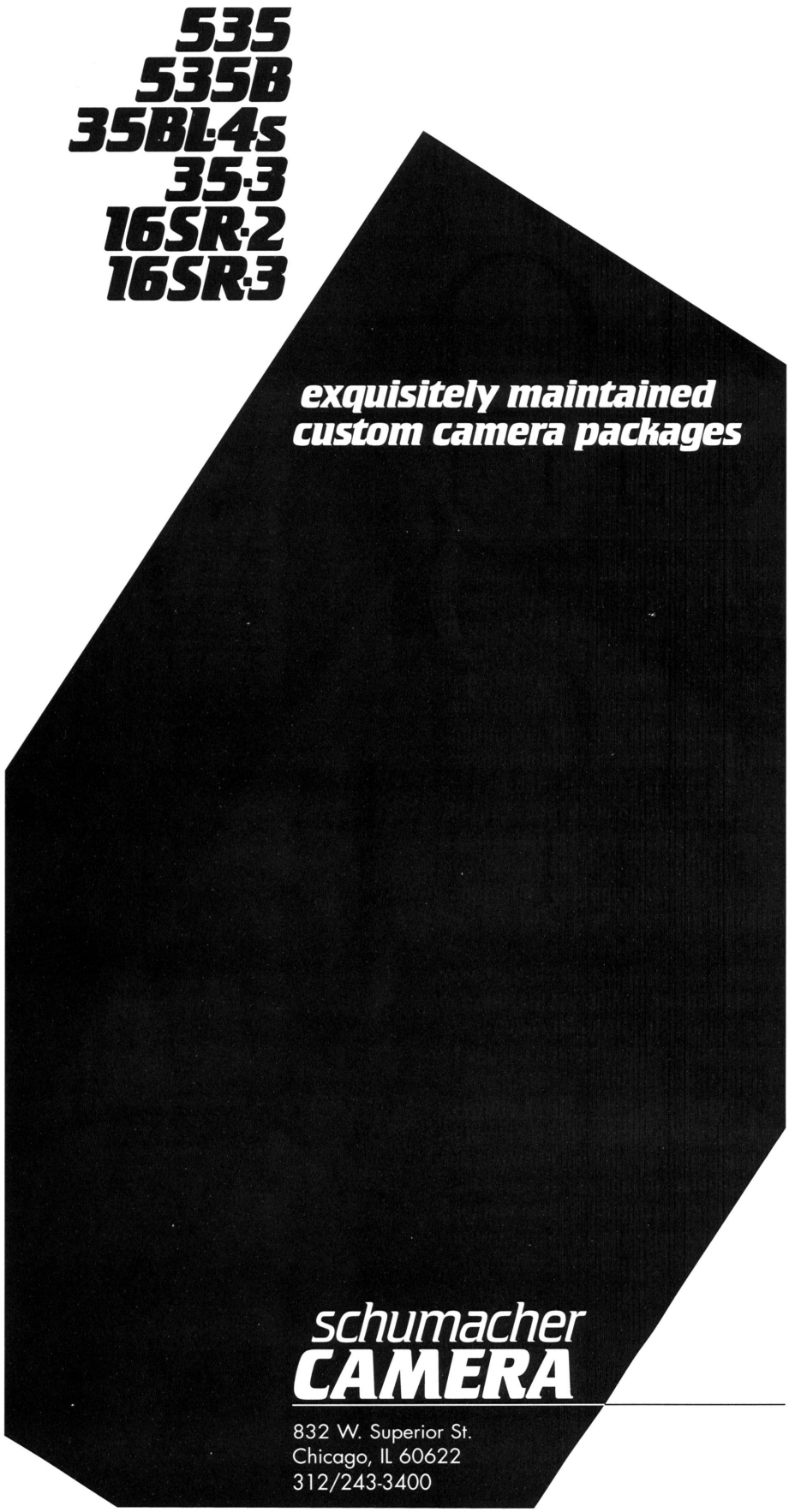
Symptomatic of our culture's ever-diminishing attention span, our film shots have become more highly charged, eruptive, and shorter in duration. Whether the demon is MTV, commercials or whatever reigning aesthetic prevails at the moment, the fact is that we ingest and devour images with astonishing alacrity and mind-numbing superficiality. What sticks? Not much, it would seem.

We are being called upon more and more to cook up slick and quick images for "lite" film appetites, and we are given ever more fancy technical toys to capture them. Have you noticed that most of the discourse you encounter now is about the tools themselves and not about how to expand our vision with them? Perhaps, you say, that discovery is the challenge for the cinematographer. Indeed, it is.

But the assault of the technology itself is so relentless, its appetite for new sensation so voracious, that we are in danger of being consumed by the very raptors we have birthed.

I wonder if it isn't time for cinematographers to put aside a bit of our beamish satisfaction with new toys and dedicate ourselves to a colloquy that gets us back to basics, to an examination of the inherent value of each shot we create. We are in fact the *custodians* as well as the *creators* of images. Images are vulnerable. They are not only the grist of our daily work. They are our lasting legacy, and how they are used *does* matter to us.

We must continue to ask ourselves a simple question. What is the effect of the carefully realized images that we lift off the scripted page, spin through our artistic sensors, and land as latent images on the so-soft emulsions of our imagination? How do we want these images to be seen? What, indeed, beyond transient stimuli do we want them to *say*?



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Electronic Cinematography: Round Three

by Frank Beacham

Remember electronic cinematography, the attempt to apply filmmaking techniques to video production? It was first embodied in Ikegami's EC-35 and Panavision's Panacam in the early 1980s, and later that decade in those HDTV "movies" that were going to knock film off its pedestal.

Well, after failing twice, electronic cinematography — known by the historic acronym "EC" — is back at bat for a third time. This round, however, there are no bold claims that video is out to replace film. And, this time, the elusive goal of matching the "film look" with video has been abandoned.

One of EC's longtime proponents, a man who admits to "falling on my face" in previous attempts, is leading the new charge in the digital Nineties. Sony camera guru Larry Thorpe says that his company's Digital Betacam is now good enough to co-exist with film as a viable imaging acquisition tool for digital television program production.

Thorpe says this is possible because high-end video has finally caught up with film in the primary imaging characteristics that make 35mm motion picture film so special as a television acquisition medium.

Those characteristics — the ones most important to the overall beauty of an image — are sensitivity, exposure latitude, transfer characteristic, picture sharpness and color reproduction, says Thorpe. Secondary characteristics — things like grain, capture rate and shuttering — will continue to distinguish the difference between the film and video look, he adds.

One of the most important of these qualities is exposure latitude, or the dynamic range of film. Modern film stocks, Sony said, have a total exposure latitude of about 9.5 f-stops. Each end of this latitude is bounded by a graceful "knee" and "toe" exposure characteristic that cinematographers exploit for artistic effect.

For decades, television cameras could only achieve a limited exposure latitude of about 6.5 f-stops. But today, with the new CCD technology, Digital Betacam has an exposure latitude of more than 11 f-stops.

Another important attribute in narrowing the film-video gap, said Sony, is the Exposure Index, or sensitivity expressed for film stock by the EI rating. Today's cameras achieve an effective exposure index of 580 in studio tungsten light, and an even higher EI of 650 in daylight. At nominal gain, Sony said, their noise is equivalent to the grain characteristic of Eastman Kodak's EXR 5245 in the 65mm format.

"Today's electronic camera can emulate an entire range of film stocks, from very slow speed to an ASA of 500, and still maintain low grain levels," says Thorpe.

However, Thorpe says he will not repeat previous mistakes by claiming that video can duplicate the look of film. Digital Betacam, he maintains, is a new visual medium with extraordinary creative potential that will co-exist with chemical emulsions in a new era of digital television.

"It's right up there with film, yet it has a look that's distinctly different from film," Thorpe says. "You can narrow that gap with your craft [by playing] with the lighting, the filters and the adjustments on the setup cards."

Those tiny setup cards hold the key to Sony's latest foray into electronic cinematography. Originally conceived as a memory device to store camera-setting data, the storage card is now being used to help videomakers emulate the image characteristics of 35mm motion picture film after it is transferred from a telecine.

In a recent presentation to New York video- and filmmakers, Thorpe (officially a Sony V.P.) said that Sony's engineers have conducted experiments to see if the setup card could be used to store a series of parameters that mimic the look of slow-, medium- and high-

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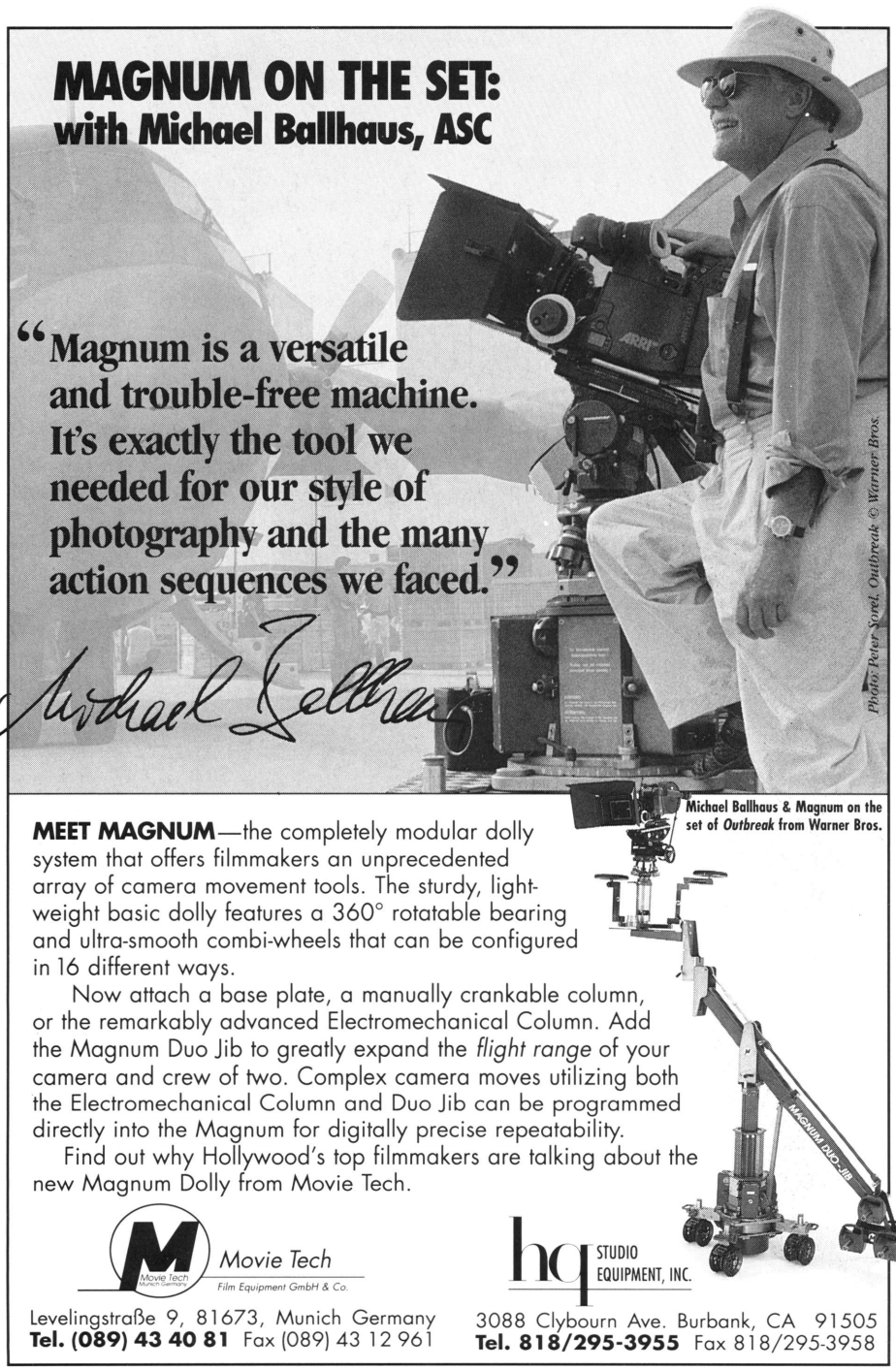
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speed Kodak 35mm film stocks. He now terms the experiments "a remarkable success" and says that the video emulation of the primary characteristics of the various film stocks, though not yet perfect, was very close at hand.

Thorpe confidently predicts that videographers will soon be able to use personal computers to program the Digital Betacam setup cards and create a signature look for their video productions. "It's like putting a certain film into the film camera," he says. "It pre-programs the camera for a given look. The variations of that look are infinite. Once you achieve your personal look, it can be stored on that card forever."

He reveals that Sony worked with DuArt Film Laboratories in New York City for the tests, beginning with the transfer of various film stocks to video. "We measured the uncorrected video that came out of the telecine," he explains. "Then we pre-programmed a series of setup cards to get as close as we could to the look of that video from the film. We've still got some work to do but I was surprised at how close we did get." Thorpe predicts that eventually there will be a catalog of hundreds of pre-programmed setup cards for Digital Betacam offered by third parties such as rental houses and cinematographers. He said setup programs can be delivered as PC files over modems or as simple printed number settings that users can punch directly into the camcorder and then store on an existing card.

Sony thinks the electronic cinematography concept will succeed this time because of the explosion of new all-digital delivery systems that will expand the overall market for high-quality video and film programming. "We don't think digital origination for television will take any big bite out of film origination," Thorpe opines. "We believe the total pie is just going to grow and grow and grow, based on the stimulus of all the new digital distribution media of the future.

"I've waited 30 years to see this myself," he says with a trace of emotion. "An important step forward has been made."

Frank Beacham's column on high-tech developments in the industry will appear in AC *on a bimonthly basis. For additional information about Sony's Digital Betacam imaging system, call (800) 635-7669 and ask for Ext. 70.*

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IDC/2 Takes Stock of Documentaries

The International Documentary Congress, along with the 11th Annual IDA Awards, offered an unflinching overview of an underappreciated discipline.

by Lisa Seidenberg

If Robert Flaherty were alive and making documentaries today, it's quite possible he would be shooting on Hi-8 video, developing product tie-ins, and seeking international co-production from European funders. *Nanook of the North* would probably be re-named *Nanook and Me.*

Approximately 200 documentary film- and videomakers were exploring those strategies and others at the Second International Documentary Congress (IDC/2) held in late October in Los Angeles. The Congress, which was held at the Academy of Motion Picture Arts and Sciences (AMPAS), was sponsored by the International Documentary Association (IDA).

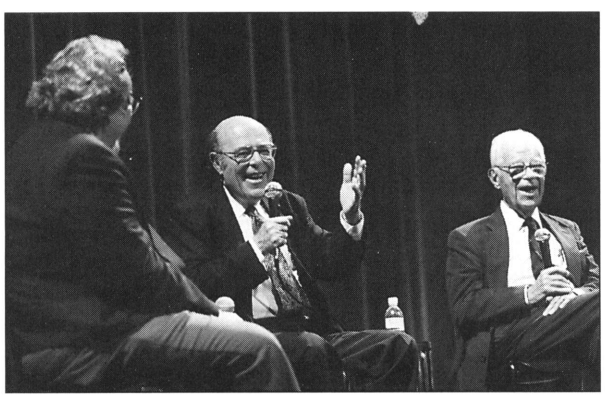
Although filmmakers gathered to discuss the "nuts and bolts" of their craft, many complained about a lack of funding. With public support for the arts dwindling, documentary producers are learning to be creative in marketing and financing. Subject choice is important, too. "If you have monkeys or whales," said German filmmaker Wolfgang Richter, "you will always get more money than if you have people."

The theme of this year's Congress was "In and Out of the Cold/1945-1995: Documenting 50 Years of Change." The event included a month of screenings, culminating in three days of panels and discussions with leading documentary producers. It concluded with the presentation of the 11th Annual International Documentary Association Awards.

Ophuls Strikes a Chord

During the opening ceremonies, journalist Daniel Schorr warned filmmakers to be vigilant about telling the truth, and warned of the increasing similarity between television news and "Reality TV" programs which blend fact and fiction.

French documentarian Marcel Ophuls, who received the 1995 IDA Career Achievement Award, offered a similar note of caution by stating that "all representations of reality are relative." Ophuls' comment was aimed somewhat coyly at proponents of "Direct Cinema" — cinema verité director Robert Drew and cameraman Ricky Leacock were seated very prominently in the audience — who had criticized his recent work, *The Troubles I've Seen,* for utilizing the same techniques of entertainment employed in standard Hollywood fare.



Moderator Bob Rosen (left), filmmaker Marcel Ophuls (center) and journalist Daniel Schorr expound on the state of filmmaking at this year's IDA-sponsored Congress.

For example, in the film, a disparaging look at television journalists covering war-torn Sarajevo, Ophuls uses old movie clips of Fred Astaire. In one scene, Astaire begins dancing to the beat of a metronome; the relentless beat continues over scenes of devastation in Sarajevo to create a symbolic statement — tragedy played against an upbeat tempo.

Speaking to his cinema verité "adversaries," Ophuls declared, "A great piece of self-delusion seems to me that nobody is quite sincere, because we always protect what we are doing. There's always this idea that people forget about the camera. This is a very stale idea. . . people always change their behavior when a camera is present."

Among the most celebrated and politically committed documentary filmmakers, Ophuls is best known for his monumental work *The Sorrow and the Pity,* which provoked intense public outrage and controversy in France when it was released in 1967. An indictment of French wartime collaboration during the Nazi occupation of France during the Second World War, the film exposed one of the most sensitive and shameful periods in recent French history. *The Sorrow and the Pity* was first broadcast on German and Swiss television. Eventually it was screened theatrically in Paris, but it was not broadcast on French television for another 12 years.

Ophuls' documentary work also includes *A Sense of Loss,* a 1971 documentary on the conflict in Northern Ireland; *The Memory of Justice,* a 1976 film dealing with the Nuremberg trials; and the Academy Award-winning *Hotel Terminus: The Life and Times of Klaus Barbie,* a 1989 examination of the notorious Nazi war criminal.

The filmmaker, whose background is a combination of German, French, American and Jewish culture, was born in Frankfurt in 1927. His family left Hitler's Germany in 1933 and eventually settled in Los Angeles. A career in

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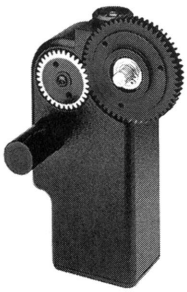

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filmmaking came naturally; his father was Max Ophuls, director of such cinema masterpieces as *The Earrings of Madame De. . .* and *Lola Montes.*

Asked if films had the power to alter history, Ophuls demurred: "Excuse me if I sound vain; I happen to be one of the few people in the world who [made] one film, at a particular time, that people say changed the political consciousness of a country. [But] I don't think that's entirely true. I think that *The Sorrow and the Pity* just happened to be made at a time when people's consciousness was changing. [Still,] it did have an influence."

Recently, Ophuls experienced a kind of vindication in France, although he had to wait almost three decades for it. In the midst of official commemorations of the Second World War, the French head of state, Jacques Chirac, made a speech that acknowledged, for the first time, French responsibility during the war. Chirac conceded that during the occupation, French police had, with very little resistance, rounded up Jewish families and handed them over to the Nazis.

Asked about the future of documentaries, Ophuls offered a mixed message to younger filmmakers. Although his sentiments were generally bleak, Ophuls admitted that *The Sorrow and the Pity* had "taught him a lot about life and about how people react to life."

Ophuls made a call for personal responsibility by adding, "In our own personal behavior — and I think this is very much the case if we want to make documentary films in the schlock capital of the world, which has become extremely repressive — we do have to think in terms of resistance or collaboration. And I think resistance is the only lifeboat."

In offering advice on how to start a documentary project, Ophuls advised the assemblage against "sending exposés and cassettes and curriculum vitae" to executives who are likely to file the materials away. "Don't give in to these silly people who think, because they are vice president of creative affairs of National Geographic or something, that they can dictate to you what the content and the form of your work should be," he said.

This urge to resistance, from a filmmaker who had struggled all his professional life to avoid compromising his principles and his art, struck a moral chord. It was a note that had not been sounded very often at previous panels and discussions, where films were chillingly referred to as "product." One producer from ITEL, described as a production and distribution company, sniffed that he only considered distributing films with budgets of $200,000 or more — miniscule by Hollywood feature standards, but a far cry from the sums raised by legions of camcorder-diarists.

Even Ophuls is having difficulties with the commercial world. Screened at festivals in New York and Los Angeles, *The Troubles We've Seen* has yet to find a distributor because of its length — 3 ½ hours — and alleged lack of marketability.

IDA Awards

On a more positive note, the IDA rewarded a handful of filmmakers whose work merited garlands. This year's Documentary Achievement Awards went to five works (four feature-length documentaries and one short) spanning a wide range of documentary styles — and budgets. The winners, selected from more than 200 entries worldwide, were *FDR,* by David Grubin; *Crumb,* by Lynn O'Donnell and Terry Zwigoff (with cinematography by Maryse Alberti); *The Devil Never Sleeps*, by Lourdes Portillo and Michelle Vallelores; *Eternity,* by Lawrence Johnston and Susan MacKinnon (with cinematography by Dion Beebe); and the short piece *89mm from Europe,* by Marcel Lozinski.

Relying extensively on archival footage, *FDR,* Grubin's psychological portrait of Franklin Roosevelt, was financed in part by the National Endowment for the Humanities for $2 million. A 4 ½-hour epic, *FDR* was broadcast on PBS as part of the *American Experience* series.

Grubin's resumé as a producer reads like a catalogue of prestigious awards; his list of achievements includes eight Emmys (seven as a producer and one as a cinematographer), the George S. Peabody Prize, the Alfred I. DuPont-Columbia University Silver Baton, a Guggenheim Fellowship, and a Writer's Guild Documentary Award. His previous work includes *LBJ,* a 4 ½-hour film biography of Lyndon Johnson, and *Healing and the Mind with Bill Moyers*, an acclaimed five-part series for PBS.

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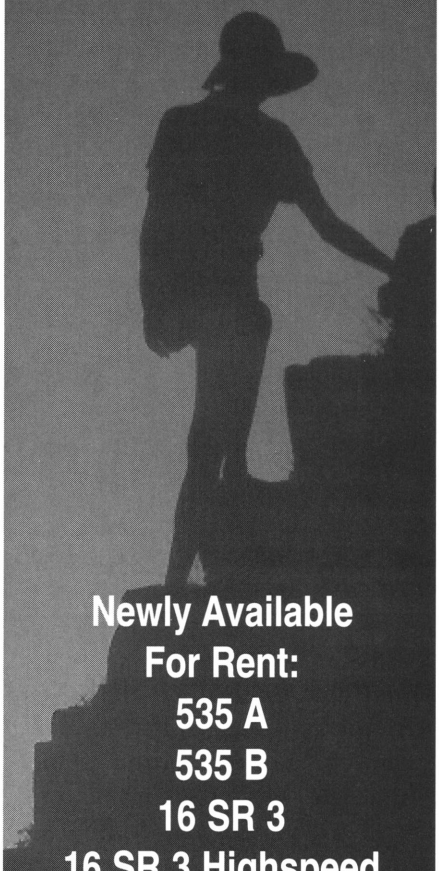

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The accomplished filmmaker detailed his work on the project at the day-long IDA DocuFest, held at the Los Angeles County Museum of Art, where all of the award-winning films were screened. He said that the most difficult aspect of *LBJ* was having to write a complete, detailed script for funders before beginning production. For many documentarians, he said, this is akin to taking photos of a baby before it's born. Grubin concluded his speech by announcing that his next project is a film biography of President Theodore Roosevelt.

On a more irreverent wavelength, *Crumb* presents a darkly humorous portrait of underground cartoonist and world-class curmudgeon Robert Crumb (see article in the July '95 issue of *AC*). It took nine years for filmmakers Terry Zwigoff and Lynn O'Donnell to raise the money for *Crumb,* which has done well commercially. Funders objected to the inclusion of disturbing material about the comic artist's relationship to family and friends.

Zwigoff had previously won critical acclaim in the documentary world with *Louie Bluie,* a portrait of Howard Armstrong, an obscure and eccentric blues musician and artist. He also directed *A Family Named Moe,* a feature-length film tracing the history of Hawaiian music. A friend of Crumb's for over 25 years, Zwigoff published some of the artist's comics in the 1970s. The duo continue to collaborate, having written a feature screenplay called *The New Girl Friend.*

Zwigoff's partner on *Crumb,* Lynn O'Donnell, has lent her skills to a number of television documentaries, including *The Voice of Tango, Memories of Carlos Gardel, The State of the Language* and *The Poet Remembers,* a profile of Nobel Laureate Czesalw Milosz.

The third IDA Award winner, *The Devil Never Sleeps,* is a personal and poetic work that investigates the intimate secrets surrounding a death in filmmaker Lourdes Portillo's Mexican family. Using interviews, still photographs, bits from Mexican TV soap operas and symbolic segments (in one, a woman's death is described as her photo sinks slowly into a river), Portillo tries to reveal the politics and intricate social rules of her hometown, Chihuahua.

Portillo is well established in the documentary community; her previous works similarly focus on issues concerning her Latina identity, and she has been the recipient of many prestigious honors and grants. Her credits also include *The Mothers of Plaza de Mayo, After the Earthquake, Columbus on Trial, The Day of the Dead, Mirrors of the Heart* and *Vida.* Portillo was recently awarded a Guggenheim Fellowship.

Michelle Vallelores collaborated with Portillo on one previous film, *Equality's Child,* a short produced for the ITVS Declaration Series which aired on PBS. Her other credits include *Imagining Indians,* which she made with Victor Masayesva, and *Through the Wire,* with Nina Rosenblum.

A startling and eerie film from Australia, *Eternity,* displayed the most distinctive cinematic style of the IDA Award winners. Produced by Susan McKinnon and directed by Lawrence Johnston, *Eternity* mixes color interviews with black-and-white, noirish dramatic recreations to tell the story of how the single word "eternity" began appearing on the streets of Sydney, Australia. This phenomenon continued for 40 years, until the mysterious writer died.

Johnston began his career as a film repairer at Twentieth Century-Fox, where he had the opportunity to study hundreds of films at close range. The Australian native moved from Queensland to Melbourne to attend the Swinburne Film and Television School. His thesis film, *Night Out,* was an Official Selection at the 1990 Cannes Film Festival and was named "one of the year's ten best films" by Village Voice critic Elliot Stein. The success of *Night Out* led to numerous opportunities for Johnston, including *Eternity.* Johnston is currently set to direct a prison drama, *Life,* written by another Australian, John Brumpton.

Susan MacKinnon's previous work includes *You Must Remember This,* an award-winning documentary about Alzheimer's disease, and *Loaded — The Gun Lovers,* which recently captured two ATOM Awards, including Best Documentary.

The IDA Award for Best Short went to the Polish entry *89mm from Europe.* Director Marcel Lozinski shared credit with the principals behind the Kalejdeoskop, one of the first independent film production companies in Poland. The company is owned by Zbigniew Domagalski, Janusz Skalkowski, Wohciech Szczudlo and Piotr Sliwinski.

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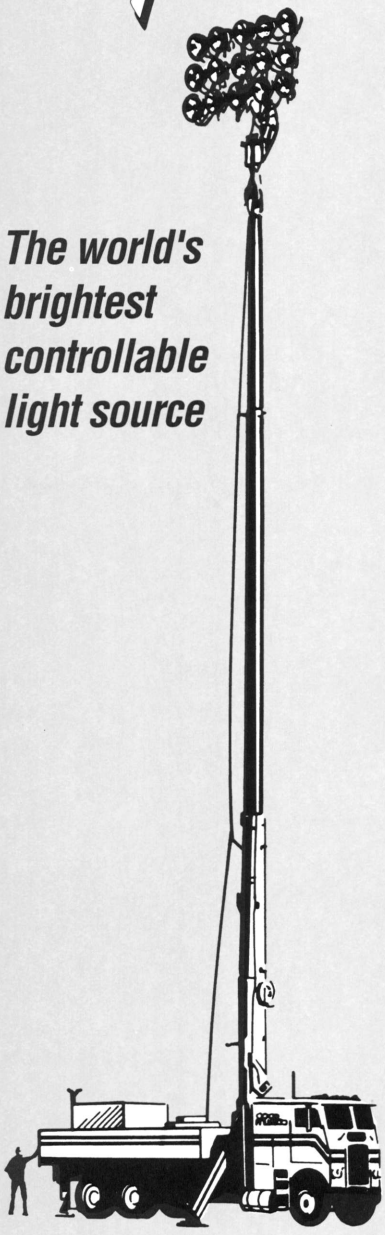
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Prior to the IDA recognition, Lozinski's film had taken honors at festivals in Oberhausen, Lipsk, Marseilles, Clermont Ferrand, Bornholm, Villa do Conde, Berlin, Montreal and Hamburg. The "89mm" in the film's title refers to the variation in railroad wheel gauges between Europe and the former Soviet Union.

In addition to these honors, the IDA also presented several other noteworthy awards. The David L. Wolper Student Documentary Achievement Award went to Katie Cadigan for her film *Out of My Mind*, a sensitive look at her younger brother's battle with schizophrenia. Cadigan shot the project on Hi-8 video camcorders (edited to betacam SP) for a mere $15,000. As part of the award, Cadigan received $1,000 worth of Kodak film stock. "I am really excited about that," she said.

A graduate of Brown University with a master's degree from Stanford University, Cadigan previously worked as a high technology marketing and communications consultant for such firms as Apple Computer, Hewlett Packard and Tandem. Eventually, she enrolled in the documentary film program at Stanford. In 1993 and 1994, she served as a visiting lecturer at the college, teaching introductory courses on film and video production. Influenced by Ira Wohl's *Best Boy*, Cadigan says she is attracted to "taboo subjects" — her previous student film was about uncircumcised males.

Also honored during the IDA festivities was Roger Mayer, who received the Preservation and Scholarship Award. Mayer, the president and chief operating officer of Turner Entertainment Co., has worked in the motion picture industry for 43 years. His responsibilities at Turner include overseeing the restoration, preservation and storage of the company's film library. He supervises licensing of film clips and stills, dubbing, booking and shipping of library films, and coordinating remakes and sequels of titles in the library. He is a member of the National Film Preservation Board, and also serves on the board of the Academy Foundation of the Motion Picture Academy.

Congress Panels

The IDC event also offered a series of panels on documentary-related subjects. Topics ranged from "Concepts of Intellectual Property" (which dealt with the parameters of copyright protection of visual works, in light of new technologies and increased reproduction of images in digital formats such as CD-ROM) to "The Next Wave/Personal Visions" (which examined the popular trend toward first-person, intimate diaries).

One enlightening discussion focused on Debbie Hoffman's *Complaints of a Dutiful Daughter*, a surprisingly humorous portrait of her mother, who is afflicted with Alzheimer's Disease. Hoffman, a 1994 Oscar nominee and an editor of political documentaries (including *The Life and Times of Harvey Milk*), noted that her project made use of "every format under the sun."

Hoffman admitted, "Quite honestly, I was able to be so revealing because I thought no one would ever see this film."

In fact, the trend toward utilizing multiple formats is a troubling issue for some documentarians, who fear that video and its short-lived formats make it difficult to preserve their work. Ricky Leacock, participating in a panel discussion titled "The Documentary Eye," debunked this idea, suggesting that work should be transferred to a digital medium, such as computer disc.

Leacock, who lives in Paris and shoots entirely on Hi-8 video with his partner, Valerie Lalonde, showed clips of *Louisiana Story* (directed by Robert Flaherty) and *Primary* (directed by Robert Drew). Speaking about Flaherty, he commented, "There was a man who had something nobody needed — integrity."

Leacock and other practitioners of "Direct Cinema" revolutionized the documentary genre with their handheld style and long, moving shots that placed the camera in the center of the action. "We were all having a lot of fun," he reflected.

Both in personality and work, Leacock presented a striking contrast to the more didactic Ophuls, but it was somehow reassuring that neither had mellowed much with age. Where Ophuls was still "fighting the good fight," Leacock came off as a wiry and wizened sprite who seemed to enjoy the mild shock value of his words.

Presenting a more sobering view of film history was Bill Murphy of the National Archives in Washington. Murphy screened outtakes from *The Battle of San Pietro*, a propaganda film directed by John Huston for the United

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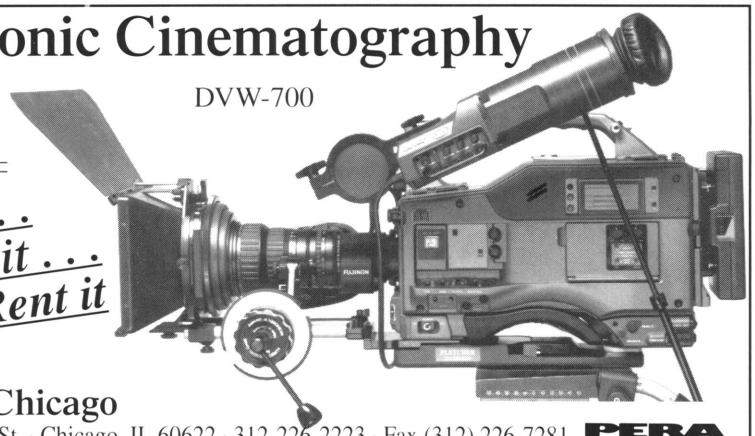

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States Army during World War II. The silent, black-and-white clips showed dead soldiers and the devastation of a small Italian town by the German Army. The footage had been censored from the final cut because the dead were American. It was a strong reminder not only of the talent of the young Huston, and the power of images, but of the value of historic preservation.

According to Murphy, future generations will never have comparable documentation of the Persian Gulf War, because videotape, as a recording medium, degrades quickly.

The most moving event of the Congress was "Five Visions/Five Voices," a presentation of five women filmmakers from around the world. Seated in a semi-circle in the Samuel Goldwyn Theater, ironically sandwiched between two giant and gleaming Oscar statues, the women appeared to be something of an anomaly in the center of what Ophuls had described the night before as "the belly of the beast."

Although documentaries have traditionally played an adversarial, outsider's role in the "industry," perhaps never before had image matched idea so perfectly. A roll call of the five women filmmakers — Dai Sil Kim-Gibson (a Korean American), Parminder Vir (from India), Alanis Obomsawin (a Native American), Kristina Schulgin (from Finland), and Vana Jakic (represented by a fellow native of Sarajevo) — illustrated the diversity of the documentary world.

Obomsawin's work, *My Name is Kahentiiosta*, chronicles the stand-off between the Mohawks and the Canadian police several years ago on the Oka Reservation near Ontario, Canada. For almost three months, the filmmaker accompanied the "warriors" behind makeshift barricades.

Speaking at a panel called "In and Out of the Cold," Russian filmmakers Marina Goldovskaya summed up the true spirit of the documentary craft when she said, "Documentary is not only a tool, it's a weapon. Today, documentary is not only archival, it is tragedy, essay, comedy; it is different things. I don't know if fiction can evolve in such directions as documentary.

"Documentary can be a candle," she concludes. "It can influence things. It can help people think. That's why I am a zealous defender of this art."

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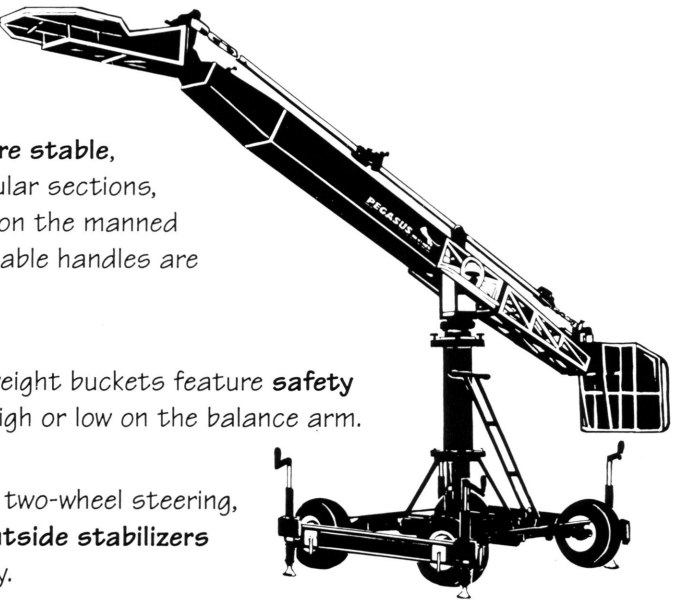

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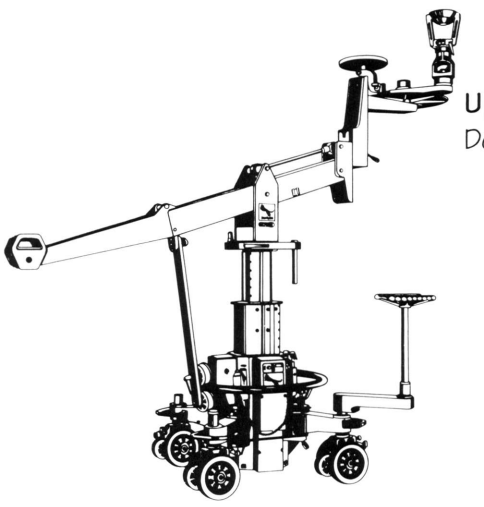

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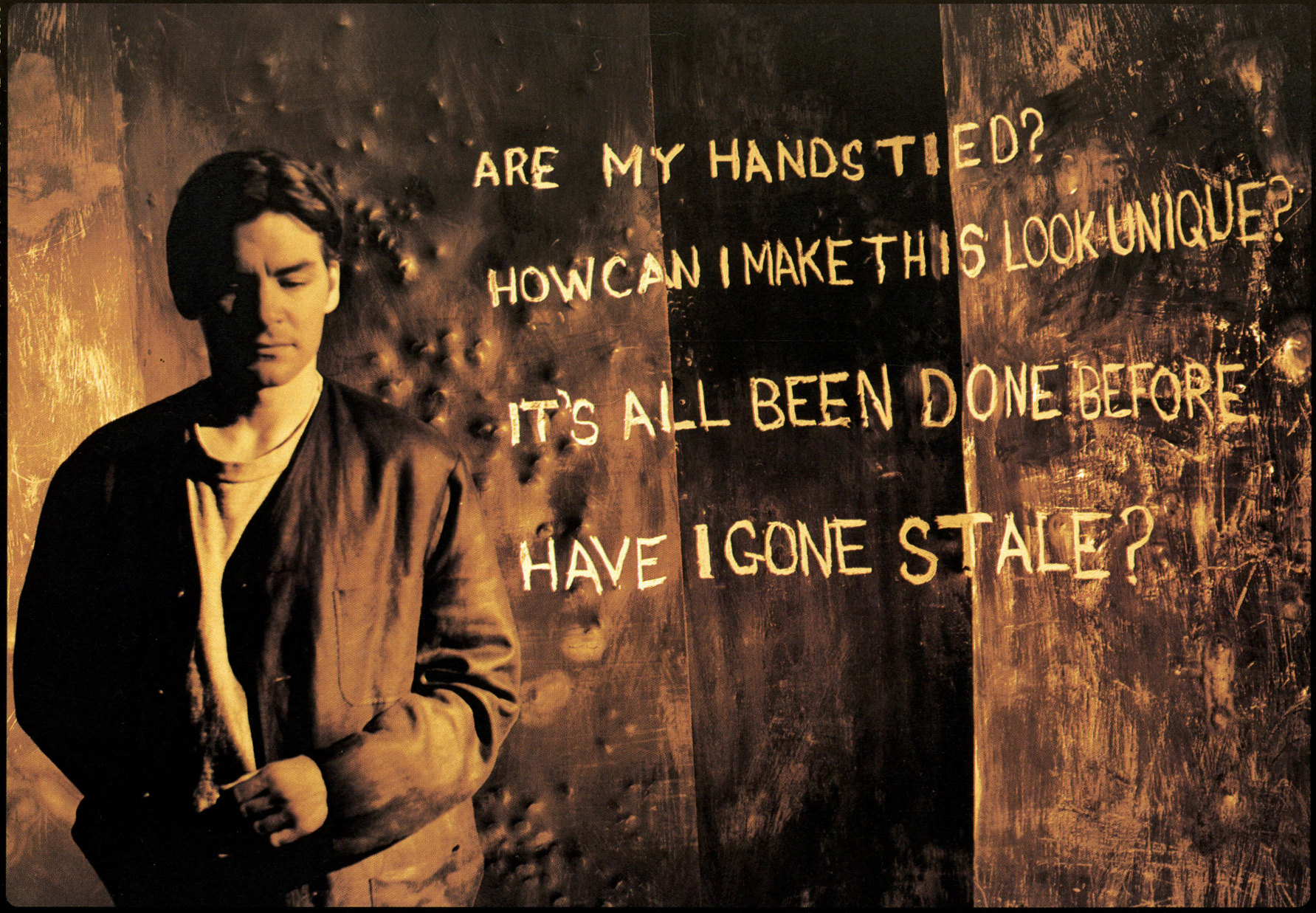

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Strangers in the Snow

Interviews by Stephen Ashton

A PREMATURE PASSING IS ALWAYS reason for sadness, but such a passing is doubly tragic when the victim has left behind a hint of great things to come. Such was the case with talented French filmmaker Claude Massot, who committed suicide in February of 1995, some time after completing his impressive feature debut, *Kabloonak*.

Kabloonak (the Inuit word for "strangers") is the story of Robert J. Flaherty, the "father of the documentary," and his remarkable efforts to make *Nanook of the North*, the landmark film about the life of the Inuit Eskimo people in the Canadian Arctic regions of the Hudson Bay. Particularly important to *Kabloonak*, set during *Nanook*'s filming between 1920 and 1922, is the emphasis placed upon Flaherty's deep friendship with his "protagonist" Nanook and the other Inuit people who led such courageous lives in the hostile lands of snow and ice.

To portray Flaherty, Massot chose actor Charles Dance, whose prior films include *Good Morning Babylon* (as D.W. Griffith), *Alien*^{3}, and *The Last Action Hero*. To play the Eskimo hunter Nanook, Massot found Adamie Inukpuk, an Inuit hunter who still lives in the traditional way — and is actually Nanook's grandson.

Kabloonak, currently being screened on the festival circuit, will possibly be released sometime later this year. It deservedly won the "Prix des Amerique" at the 1994 Montreal Film Festival for Best Technical Achievement and Photography for Massot and directors of photography François Protat and Jacques Loiseleux.

Loiseleux, an award-winning cinematographer whose credits include films by Jean-Luc Godard, Yves Boisset and five films by Maurice Pialat, shot footage in Siberia; Protat did the honors in Canada. A Frenchman, Protat graduated from the National School of Cinematography in Paris in 1966. He moved to Canada in 1969 and since then has photographed 40 features and TV movies in Canada, the U.S. and France. His diverse credits include *Johnny Mnemonic, Mark Twain, Beautiful Dreamers, Winter People* and *Joshua Then and Now*, for which he received a Genie Award for Best Cinematography.

With a pronounced sense of the film world's loss, *AC* herewith presents Massot's final thoughts about his promising work on the project, along with comments by Protat.

***American Cinematographer*: Your own background is in documentary film and ethnic cinematography. How did you start?**

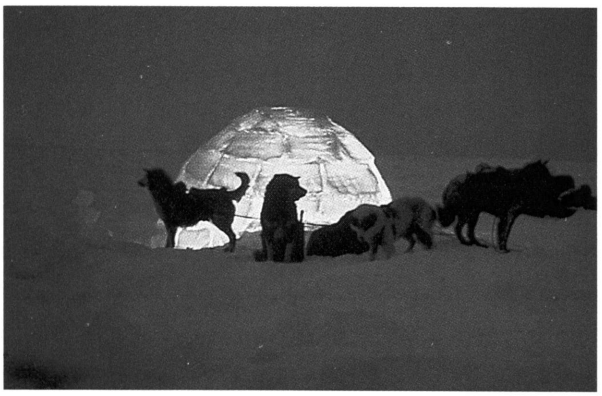
Claude Massot: Actually, my interest was originally in dramatic film. I was at the I.D.H.E.C. [Institut des Hautes Études Cinématographiques] and I thought their approach was overly theoretical. I left there to study at the Cinémathéque du Palais de Chaillot. At that time my masters were Buñuel, Bergman, Renoir, Nicholas Ray, Visconti — not Vertov [Russian; *Man with A Movie Camera*] or Grierson [Scottish; *Drifters, Song of Ceylon*], or even Robert Flaherty. I began my career doing short dramatic films, but quite by chance I was asked to shoot a documentary. I became fascinated with travel, adventure and the discovery of the world and its people, particularly those of geographic extremes, those who have learned to adapt to harsh environments.

Early in my career, I shot a documentary in South America with the Amazon Indian forest tribe of the Wayanas — *Chronique de quelques Indiens Wayanas* [which won the Critics Award in Paris]. I went as a cinematographer, not as a reporter or a journalist. I really enjoyed making the film, and I made more and more documentaries.

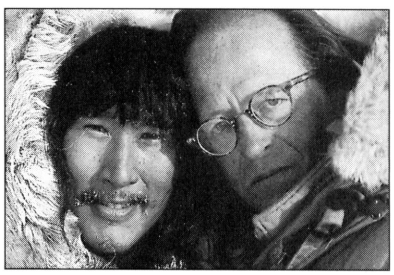
Documentary filmmaking is a tremendous power. It is an opportunity to meet modest people or very important people, to go anywhere in the world with my camera. It never feels like work. It is a growing and maturing experience.

***AC*: What was your first exposure to documentary filmmaker Robert Flaherty? Do you recall your first experience of seeing *Nanook*?**

CM: I was in my twenties and at the Cinématheque du Palais. I was pleased and touched by what I saw. He was very attached and warm with people. Nanook would never have been as he was in the film if he hadn't had the relationship he had with Flaherty. You can see Nanook was serious, but he was also having fun in front of the camera. You always feel the rapport between them.



Photos by Jean-Francois Sevageau.



Flaherty was reproached for not filming the Inuit people in the stage he found them in during 1920. But he always made it clear it was not his intention to film the Inuit people as they were at the time, but as they were before the white man arrived. He really believed that white culture would destroy theirs and he wanted to have a testimony to what they were before they lost their soul.

An igloo glows from within, beautifully exemplifying the authentic lighting demanded by director Claude Massot (at right with actor Adamie Inukpuk). Said Massot, "The first time I was in an igloo, I was completely overwhelmed. It's a quality of light that can only be matched by real snow and ice. Because of the cracks between the blocks, you can see the light changing outside, the color of night coming."

An anthropologist studies from a distance. Flaherty was not a neutral observer. He created relationships and filmed his subjects as if they were his own family.

What's really important about *Nanook of the North*, and all of Flaherty's films by the way, is that it is truly based in reality. He spent years with these people before he started his film. Flaherty carefully selected real people for his "cast" and actually directed them to portray themselves before his camera.

I don't believe in the theory of cinema verité. For me, there is no invisible camera. Once the camera is there it changes what's happening in front of you. It was a very popular idea just before I started to make documentaries. It was very seductive, but once I began to work I realized the theory was an impostor.

***AC*: How did you get the idea for *Kabloonak*?**

CM: I realized that because I've had great pleasure in making documentaries, I owe a debt to documentary film; why not make a fiction film based on Flaherty and Nanook? I went to New York to Columbia University, where I had access to Flaherty archives. I discovered that *Nanook of the North* was not only important as the first documentary and one which is great even today, but also because it was made under extremely difficult conditions. I knew it would make a great story.

***AC*: So at this point you set out to make your own documentary about the Inuits?**

CM: Yes, I went to the town where Flaherty shot *Nanook*. I wanted to understand the physical resistance in the Great North so I'd be more prepared for my fiction shoot. I also wanted to tell the story of the relationship that developed between Flaherty and Nanook. So doing the documentary gave me the chance to document how the Inuit people felt about Flaherty. Even though he had been to their village 58 years earlier, they had vivid details about him within stories handed down from generation to generation. I was extremely surprised by how many Inuit people remembered the shoot. It was amazing how they remembered down to the smallest detail — for example, that he kept the igloo for his film open so there would be more light inside for shooting. They remembered that when the children would get in the way, he would become furious. He was obsessed with his work.

The testimonials from the Inuit people provided me with some of the best details in *Kabloonak*. It was a great resource. The documentary [70 minutes long] is called *Saumieluk, la Grande Gauche* which means "Saumieluk, the Big Left-handed Guy." The Inuit love nicknames and they called Flaherty "Saumieluk."

***AC*: The shooting of *Kabloonak* was particularly strenuous and the film was a long time in coming. Can you tell us about the shoot?**

CM: We set out to shoot the film in Russia, but in Siberia there were tremendous production difficulties. We had to translate everything into five languages and of course the weather was horrible. An icebreaker served as our hotel and production headquarters. The thaw began early so we had to head north. We would find a good site, set up and start to work and suddenly the southerly warm winds would catch up to us. The igloos would melt and the snow was too messy. We couldn't work and had to move further north. Eight weeks into the shoot, the icebreaker got stuck. We had three options: wait for the thaw, which would take weeks; wait for a nuclear icebreaker; or dynamite the ice. My special effects people used their last round of dynamite and suddenly the boat moved a tiny bit, just enough to get it moving. Then word came that the insurance company was giving us a month more of shooting. So we left for Paris, where we edited together what had been shot in Siberia, and showed the footage to Telefilm Canada. They liked what they saw and committed a little over $1 million. Pierre Gendron and his company, Bloom Films, assumed responsibility for the co-production and we moved to Frobisher Bay near the Arctic Circle in Canada in March of '93.

***AC*: With these production changes, how did you maintain control of your film?**

CM: Cinema is the art of compromise, but it was very important for me to hang on to three principles that could never be challenged: the film would be shot in natural locations — no studio shots; the cast would be real Inuit people, including the role of Nanook; and real igloos would be used, which provoked the greatest hostilities from my crew — igloos are very small.

***AC*: How did you find Adamie, who plays the part of Nanook?**

CM: During the documentary shoot, I was becoming very discouraged because I knew that the success of Flaherty's film was due to the charisma of Nanook. I couldn't find anyone like him until I met the cousin of Adamie, who told me that Adamie is the grandson of Nanook! I went to his house and when I knocked on the door, it opened and there stood Nanook! I asked Adamie if would he like to make a movie with us about his grandfather and he said, 'Yes, of course.' He not only became the star, he brought his dogs with him. Before I left, I showed him a cassette of Flaherty's film so he could really see what he was going to be doing.

***AC*: You spent 14 weeks in Siberia and 27 days in Canada. Did the same crew stay with you the entire time?**

CM: Only a few crew members stayed throughout both parts: the key grip, the chief electri-

Flaherty (Charles Dance) instructs Nyla (Seporah Q. Ungalaq) and Nanook (Inukpuk) in filmmaking technique. The real Flaherty's crew was composed entirely of Inuit people. For night interiors, cinematographer François Protat used dimmed 100-watt Fresnel pepper lights to replicate the glow of oil lamps.

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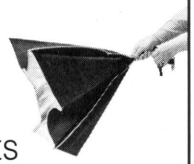

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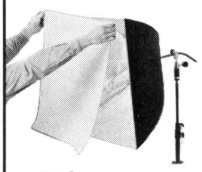

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***AC*: Is it true that Flaherty had no production crew with him?**

CM: Flaherty went on his own. He trained the Inuit people to be his production assistants. While in Siberia I had 70 people, so I have great respect for Flaherty, who worked alone even in developing his film.

***AC*: In *Kabloonak*, the polar bear hunt in *Nanook* is revealed as fiction.**

CM: It's true. Flaherty left for six weeks to shoot Nanook hunting for polar bears, but there were no bears. They endured terrible hardships and brought back almost no footage. In the end, the only combustible material they had was their film, and Flaherty had to burn some to save their lives. The burning film is a magnificent symbol. He leaves and goes on this journey for his film and he almost dies in the process. In the end it's his film that saves his life.

❧ ❧ ❧

***AC*: François, you came onto this production for the Canadian section of the shoot. How did that come about?**

François Protat: When I was starting work in France I knew Jacques [Loiseleux]. When the film came here to shoot, he was unable to rejoin the production so I came in at that point. I didn't know Claude Massot personally at that time, but I knew his documentaries.

***AC*: Claude had some stringent requisites about how the film was to be shot. One was his passion to use real igloos. Did you agree with him?**

FP: (Laughing) Ah, yes! The igloos! Yes, the light is absolutely magical. Very soft. It's blue, but a very special blue. You can feel this color inside the igloos and it's wonderful. They glow. We became fixed on the one idea: to capture that special light, to re-create the feeling. The only way to do it was with real igloos. If you spend a few hours in the special place like a real igloo, and you're sensitive to light and form, you can see how precious it is. That incredible strange light just surrounds you. It is alive — the whole building is alive. It melts. It moves, it cracks, it's not stable.

***AC*: In *Kabloonak*, we see Flaherty making an igloo which is open on one side to accommodate a large family and to let in more light. Did you film in partially open igloos for more light?**

FP: No, we filmed in fully-enclosed igloos — and that became a real issue. Igloos are teeny tiny. We only had about 10 square feet for the crew, camera and equipment. There is no door, only a very small tunnel. One person at a time must crawl though the tunnel to the inside area. If the make-up person had to go in, someone would have to come out! We tried to build bigger igloos but they melted. Finally, we made little igloos attached to the main igloo for the cameras and crew.

***AC*: So you used two cameras?**

FP: Sometimes, because it was particularly important for reaction shots. It was very difficult to get repeat shots with Adamie. He wanted to be spontaneous, so it was very useful to have two cameras.

***AC*: Did you use lights to enhance the interior of the igloo during the daytime?**

FP: We could have used just available light, but I added a little fluorescent light for accent and fill, and to provide continuity. Any lighting I had to do had to be totally natural and I had to be very creative with it; I had to find ways that they wouldn't be seen, and at the same time not damage the igloo. The igloos reacted to heat and cold, and the fact that we had two or three times the normal number of people inside made it too hot as well.

***AC*: Shooting at night must have been very difficult. It's deadly cold and dangerous to travel — even the Inuit stay inside at night. How did you solve this problem?**

FP: It was out of the question to film at night, so we had to get those interior night scenes during the day. I developed a little trick which is very valuable: I covered the igloos with dark blue semi-translucent plastic tarps which gave us the right amount of blue. These tarps were $8 each — we bought out the whole store! But there was a price to pay: the igloos warmed up too fast because the heat could not get out and they

started to melt. So we had to stop filming regularly to take the tarps off and let the igloos cool down.

***AC*: So did you supplement the 'night' interiors with lights?**

FP: I had to use the smallest lights available — 100-watt Fresnel pepper lights on dimmers — to achieve the color temperature of the oil lamps, about 2500 or 2300°K.

***AC*: Did you use any filters on the camera lens or lights?**

FP: I used no color filters on the lights. By dimming the lights, by getting the right color temperature on the filament itself, I got what I wanted instead of faking it. And I never like to use color effect filters on the lens; they color everything in the shot. I wanted all the shades of the snow — greens and blues, yellows and ambers. The colors of the snow are just incredible, and so is the transparency of the ice — it glows from inside.

***AC*: How did you shoot the night exteriors we see in the film?**

FP: For a director of photography, shooting night scenes near the North Pole is the ultimate nightmare. There is not enough power to bring in huge lights or a big crane to fake the moon. On top of that, it's dead, dead cold. So my producer said, 'Well, we have to shoot day-for-night.' But to do that you need really special conditions, and to make it look good repeatedly it was virtually impossible.

Finally I had this vision, but I didn't think we could make it happen. My intention was to do all of these scenes during the magic moment between twilight and night. I had only about 20 minutes of magic, beautiful dark blue, electric blue, Arctic polar blue light to work with. It's absolutely gorgeous but we had only two takes each night and it took five nights to film the scenes. I was always scared after the second take, thinking it was too dark, but it came out with such a unique blue — it is fantastic.

***AC*: How did you check your work? What did you do for dailies? Did you use a video tap?**

FP: A video tap at -60°F is just one more piece of equipment that can go wrong. So Claude relied entirely on my eye. After about a week we got VHS cassettes. I had

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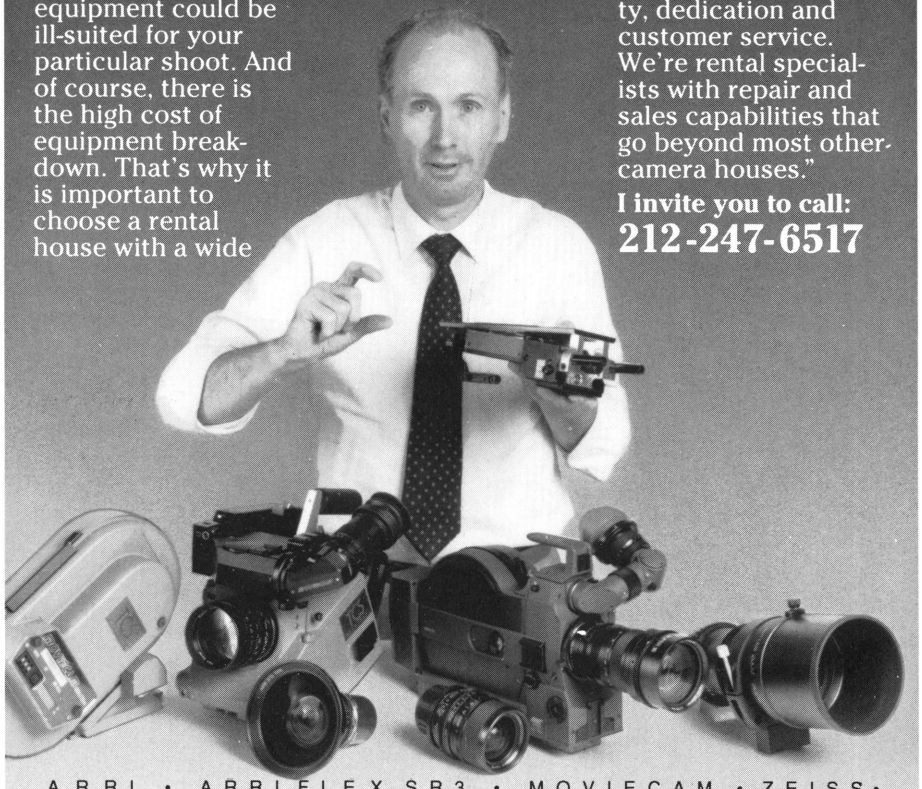

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mixed feelings with VHS transfers of my work. I ended up not even looking at half of what I did.

***AC*: You researched the cameras in Montreal before the shoot began. Tell us about that.**

FP: I found a large cold-storage room and used it for research. I lined up an Arriflex BL4, a Moviecam, a Panaflex GII, and a Platinum Panaflex. We loaded each camera with the same film, brought down the temperature by five-degree increments and rolled the film each time the temperature dropped. The only camera that ran at -60° was the Platinum because it has one more heating element by the gate. It's the only one with that device and it never froze on me during the entire shoot.

***AC*: What else can you tell us about the equipment?**

FP: Luckily I had a lot of experience in the early days of my career shooting low-budget films. But even so I knew I would have to have some vital items. I found a new Honda generator — very powerful, 12 kilowatts — which fit perfectly in a large Inuit sled. We didn't have time to add on a governor to it to make sure the frequency would be perfect, so I went with flicker-free ballast HMIs, 4Ks and 2.5K Pars. Everything was wrapped or put into boxes to protect it from the cold.

***AC*: What kind of camera did Flaherty use?**

FP: He used an American camera, a Carl Akeley. He cranked it by hand, and of course there were no heating elements. But it was the only camera that didn't need lubrication, so it didn't freeze up — lubrication freezes first.

***AC*: Flaherty was really a pioneer. It makes you wonder how he could do this.**

FP: I was so lucky to be making a film about Mr. Flaherty and the making of his film. He shot and processed the negative, printed the negative on positive, processed the positive and projected the positive — all on location. He showed dailies to the Inuit people by piercing a hole in a wall and using the sun as a lamphouse for his projector. He did the same thing to print the negative, using sunlight. He did the same thing that Nicéphore Niépce, the inventor of photography, did in 1816.

***AC*: During the polar bear hunt sequence in *Kabloonak*, Flaherty and Nanook were close to dying. They fell into the water and had run out of kerosene to warm themselves or cook food. Flaherty decided to build a fire by burning a can of his film stock. How did you shoot this scene?**

FP: In those days, film stock contained highly-flammable nitro-cellulose. It actually explodes. It was difficult to find celluloid stock because it's no longer made — it's banned. But we finally found some 1930 raw positive film stock which burnt slowly at first and then exploded. But for us to film the part in the water was dangerous. We did it on location of course, by making a hole in the ice. The water was absolutely freezing and had to be kept moving with pumps to keep it from becoming solid.

***AC*: What film stock did you use for *Kabloonak*?**

FP: For scenes shot during the magic moment, I used 5296 and for day I used 5248. Everything was so bright and white I didn't need any speed. I was looking for fine grain only. [We used a regular 85 filter]. There were no tricks; I stayed very simple. I'm glad people appreciate that because it's so trendy to be glamorous.

***AC*: Tell us about working with first-time director Claude Massot.**

FP: Claude is an extraordinary, good-hearted man. He's been working on this project for five years non-stop. He has a special quality which can make him a great director: he is stubborn, but stubborn for good things. Some of his choices caused us incredible problems, but he knew what he wanted. I have admiration for that. First-time directors often have no clue how difficult some things can be. So I really enjoyed helping Claude make a project that could have been destroyed by little mistakes. I'm proud of what we did to create the images. Not many directors are that passionate about light and how it makes you feel.

"When the Agency Creative says: *I'll be directing* and the out-of-town Producer says: *We can rent that here,* that's when agenting is more than writing contracts," says D.P. agent Jayelle Sargent

"One of my client DPs called from the location. *Jayelle, we're not going to be able to deliver this,* he said. *It's everything we suspected and worse.*"

No need for Clairmont

"This was a job in another State. My DP had wanted to use Clairmont equipment, but had been persuaded not to by the local producer. The agency creative guy would be directing. When my DP arrived, he discovered that the agency guy had never really directed and that some of the promised camera gear didn't exist locally."

"Take it out of my paycheck!"

"After I spoke to the producer, my DP called Clairmont. End of equipment problem. But some producers dig their heels in harder. On another job, one of my DPs ended up saying: *Rent the damn lens and take it out of my paycheck!* That was all the producer wanted to hear; but he also heard from me."

Jayelle Sargent: equipment from Clairmont never on the list of problems.

"In situations like this, I'm often the only one on the DP's side. Part of my job is to reason with a producer who has cut my DP off at the knees. If a DP threatens to walk, it looks unprofessional. But if I tell a producer my client may have no other option, the producer gets the message."

Diplomacy

"I used to be a line producer at N. Lee Lacy, so I'm familiar with all the potential problems. Overtime versus flat rate, for example. Overtime? Hang it on the DP! Dicey camera? Blame the crew!"

Clairmont makes my job easier

"One item that can definitely be removed from the problem list is the equipment," says Ms. Sargent. "When a producer wants to rent it locally or at a bargain rate, I tell him: *An unreliable camera means overtime.* If my DP rents Clairmont gear, I know my job will be that much easier."

Jayelle Sargent runs the Hollywood based HFWD Agency with Donna Woodroof and Susie Goldberg, representing live-action and vfx DPs.

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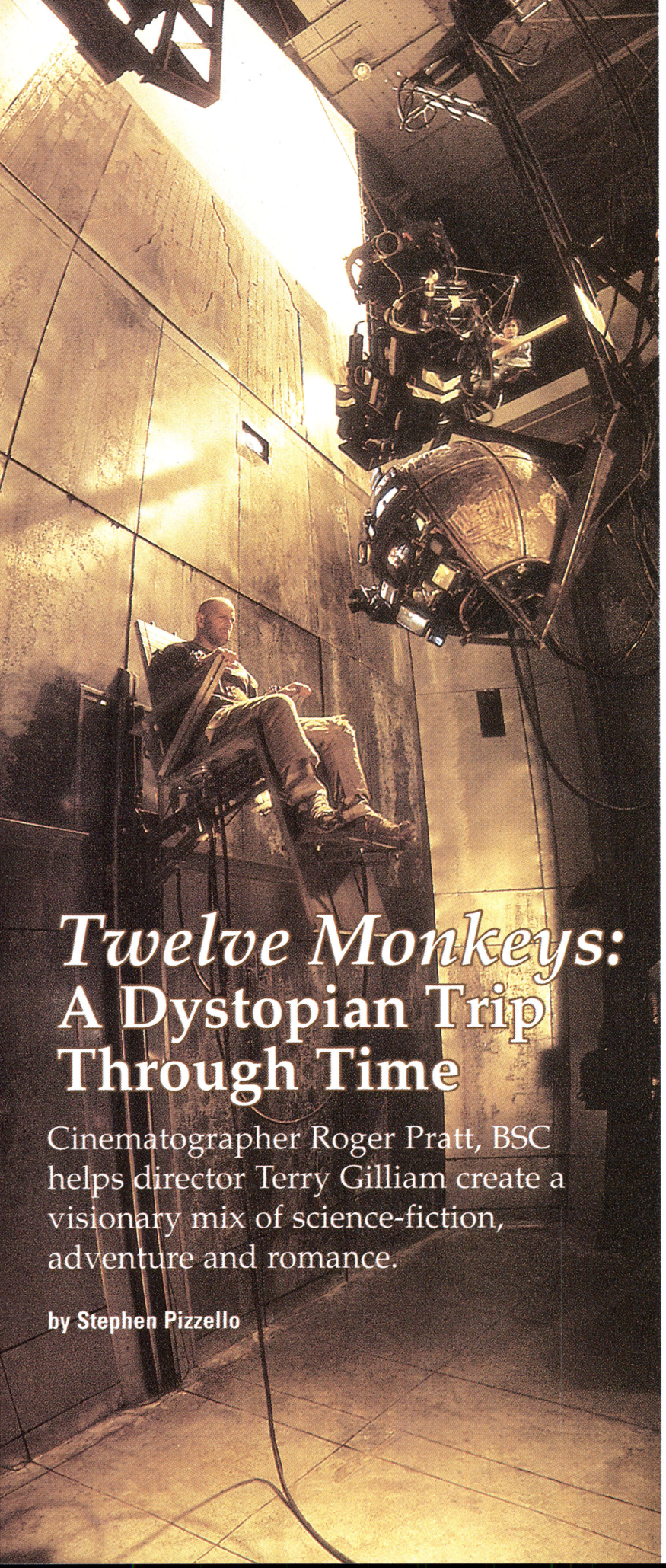


Twelve Monkeys: A Dystopian Trip Through Time

Cinematographer Roger Pratt, BSC helps director Terry Gilliam create a visionary mix of science-fiction, adventure and romance.

by Stephen Pizzello

Cinematographer Roger Pratt's association with director Terry Gilliam began, appropriately enough, during a hunt for the Holy Grail.

In Pratt's case, the grail in question was a 14mm lens, which had been left behind when the infamous Monty Python comedy troupe trekked off to a mountainside location to film the hilarious Bridge of Death sequence for their 1975 feature *Monty Python and the Holy Grail* (1975), a rollicking, low-budget lampooning of the King Arthur legend. Destined to be a cult classic, *Holy Grail* was co-directed by Python's eccentric pair of Terrys, Messrs. Jones and Gilliam. The latter's fiendishly surreal cartoon creations had added an extra dollop of dementia to the troupe's loony, much-beloved television series (earning him a British Academy Award for graphics in 1969), and Gilliam had also contributed his acting, writing and animating skills to the Python group's 1972 film debut, *And Now for Something Completely Different*.

Before crossing the Bridge of Death, however, Gilliam would need a helping hand from Pratt, then an enterprising clapper/loader. Apprised of the missing wide-angle lens, Pratt took it upon himself to defy the daunting terrain and ensure its retrieval; the journey would prove to be a momentous turning point in Pratt's nascent career. Recalls Gilliam, "We were filming the Bridge sequence up on a mountain, at a place called Glen Cove. We were about a mile and a half from the road; to get to it, you had to descend down the mountainside, cross a river and go up the other side. When he found out that the lens was missing, Roger disappeared and was back with it in something like 10 minutes! I thought to myself, 'This is an extraordinary character.' We've been buddies ever since."

"Terry thought that I had somehow magicked up the lens," Pratt offers with a chuckle. "He considered it a kind of supernatural event."

In fact, Pratt's feat could be construed as the film industry equivalent of alchemy, spurring his transformation from an eager assistant into a highly respected director of photography. The first reward for his misty mountain hop was a *Grail* cameo in which he is identified as the film's beleaguered Clapper Boy; years later, his friendship with Gilliam would lead to enviable gigs as cinematographer on the director's most successful pictures, *Brazil* (1985) and *The Fisher King* (1991), and as director of second-unit photography on the fantasy epic *The Adventures of Baron Munchausen* (1989). Pratt's resumé also includes collaborations with Tim Burton (*Batman*), Neil Jordan (*Mona Lisa*), Kenneth Branagh (*Mary Shelley's Frankenstein*) and Richard Attenborough (*Shadowlands*).

From Midlands to Movies

For Pratt, such assignments are the culmination of a longtime love of the cinema. Raised in Leicester, in the English Midlands, his interest in movies was sparked by his father, a priest who frequently showed religious films at his parish. To the

youthful Pratt, however, a career in motion pictures seemed remote at best. "Seeing those images on the screen gave me a complete thrill, and I began thinking seriously about pursuing movies as a vocation," he says. "But being in the middle of England, nobody knew what to suggest as a course of action. It was only when I'd been to college that I decided to go to the London Film School. The people there were divided into two basic types: most people wanted to be directors, and the rest of us shot their films for them. Very early on I decided I didn't want to direct; I wanted to be involved in the camera side of it. But I still did a number of assignments with sound and editing just to get the experience."

After graduating, Pratt found that he needed to gain entry into the union, so he obtained a job at a film laboratory, where he spent several years resurrecting black-and-white movies and old nitrate films for foreign television. He then began working as an assistant on documentaries and any other productions he could find. "That's when I got involved with an outfit called Chippenham Films, which had connections with the Monty Python crowd," he relates. "Python used to produce and shoot short films that Chippenham sold to business conventions that needed a bit of comic relief. Eventually, after many years, I was asked to be the loader on *Holy Grail*, and that's when I met Terry."

The cinematographer notes that the Python troupe encouraged all hands to pitch in with ideas, an ethic that is still evident on Gilliam's sets today. Pratt soon applied that experience to his own career path, which began progressing along traditional lines. "I was working on commercials, and I gradually moved up from loader to focus puller to doing a bit of operating," he says. "I was starting to do a bit of my own camerawork on drama documentaries, and it got to the point where I'd done a few commercials. At about that time, Terry was gearing up to do a short sketch film called *The Crimson Permanent Insurance*, which wound up being part of *Monty Python's Meaning of Life*. He asked me to photograph that, and said it would be about ten days' work; six weeks later, we were still at it!"

From there, Pratt stayed behind the camera, and wound up shooting a short film called *Dollar Bottom* for director Roger Christian, who subsequently asked him to serve as director of photography on *The Sender* (1982), a modestly-budgeted parapsychology thriller. Gilliam was impressed enough to offer Pratt the cinematographer's slot on *Brazil*, a Kafkaesque black comedy of majestic proportions.

Prior to the film's release, Gilliam endured a pitched battle with Universal Studios over the film's running time and downbeat ending, but the director held his ground and was able to keep his vision intact. Upon its release, *Brazil* was hailed by critics and remains a favorite of film buffs everywhere. "*Brazil* was a huge step up for me, and I was very grateful to Terry for giving me the chance," Pratt says. "Terry's one of the most talented directors I know, and his great strength is that he has a total grasp of the entire canvas. He knows about graphics, music, writing, editing, marketing, distribution, you name it. I think all great films are conceived as a whole right from the beginning. When we're working, there is no firm cutoff point between Terry and anybody working on the film. He's a very democratic person, although he is very clear about the general direction of what he wants to see. He begins designing the look of his films at the very start of the project."

Tackling *Twelve Monkeys*

Gilliam's firm understanding of the moviemaking machine's various gears certainly came in handy on the duo's latest ambitious undertaking, *Twelve Monkeys*. The film's screenplay, by David and Janet Peoples, was inspired by Chris Marker's 1963 French sci-fi featurette *La Jetée*, which told its unusual story almost entirely in black-and-white still photos. While elements of *La Jetée* were retained for the new script, *Twelve Monkeys* has considerably expanded the tale's visual and narrative scope. The new version of the story begins in the year 2035, when 99 percent of the Earth's population has been wiped out by a mysterious plague; the survivors of this holocaust eke out their existence in a desolate underworld. In the hopes that the resources of the past might help them rebuild the future, a group of scientists living beneath the once-populous city of Philadelphia decide to use time-travel to send a lone explorer back to 1996, where he may be able to discover the source of the fatal contagion.

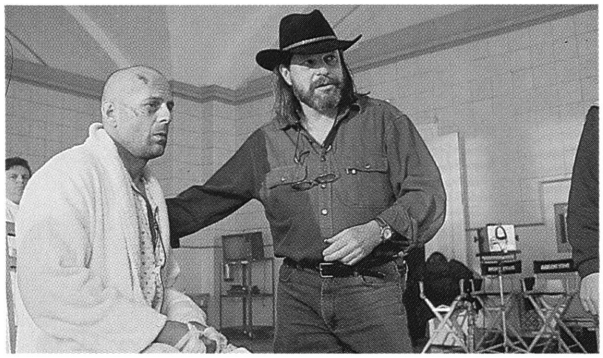
After considering various candidates to carry out their perilous plan, the scientists select Cole (Bruce Willis), a convict who is continually haunted by a mysterious image from his childhood. Upon arriving in 1996, Cole meets Jeffrey Goines (Brad Pitt), the mentally unstable son of a renowned scientist, and Dr. Kathryn Railly (Madeleine Stowe), a psychiatrist and author who specializes in the study of madness and prophecy. Railly soon diagnoses Cole as a delusional madman, but as their relationship progresses, she begins to believe his dire account of mankind's fate. As the two attempt to unravel the source of the Earth's decimation, they focus on the only two clues they have: Cole's opaque childhood memory and a series of puzzling symbols created by a group known as the Army of the Twelve Monkeys.

In planning the visual design of the film, Gilliam drew upon

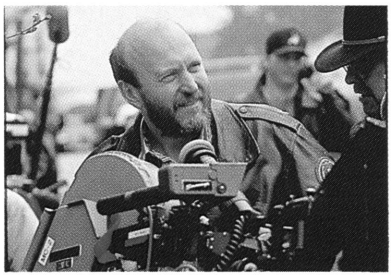
Opposite: ***Strapped into an "elevator chair" in the Engineering Room, Cole (Bruce Willis) is interrogated by scientists with the help of the ominous, roving Video Ball. The heavy prop was mounted on a gimbal rig which allowed a series of probing moves.*** **This page:** ***A closer view of the Video Ball and its array of 15 television monitors. Pratt found that an f-stop of 4 worked best for the sequence.***

Top: ***Gilliam confers with Willis on the "mental ward" set.***
Bottom: ***Manning the camera, Pratt chats with his director and longtime friend (in silhouette).***

a variety of reference materials, focusing primarily upon the work of architectural artist Labias Woods. Gilliam describes Woods as "a visionary who does these great drawings of impossible architecture. His work was a big influence on the look of the film's futuristic sequences." Pratt notes that Gilliam's love of architecture, with its vertical lines, is one reason that all of his pictures, including *Twelve Monkeys*, have been shot in the 1.85:1 format rather than anamorphic.



Bent on creating a uniquely memorable vision of the future, Gilliam enlisted the aid of veteran set decorator Crispian Sallis, whose credits include *JFK*, *Driving Miss Daisy* and *Aliens*. Sallis was charged with creating a future world crammed with "found articles" from the pre-disaster past. The resulting hodgepodge of materials led the designer to explore some eccentric options, such as turning an old sander into a doorknob and a vacuum cleaner into a flashlight. While scouring flea markets and salvage warehouses, Sallis and his crew collected scores of items from a variety of eras, including the Renaissance, the Victorian Age, World War I and II, and the Fifties and Seventies.



During the film's preproduction stage, Gilliam invited Pratt to his home in England several times to discuss his concepts for the picture's look and photographic style. The director then embarked on a series of scouts to find locations that matched his imaginings, accompanied by location manager Scott Elias and production designer Jeffrey Beecroft (a two-time Oscar nominee for his work on *Dances with Wolves* and *Stop Making Sense*). After considering New York, Los Angeles and London as primary sites, Gilliam instead opted for Baltimore and Philadelphia. "The film boards in both places were extremely helpful. It was always the plan to shoot on location, because the film was meant to take place in the real world," notes Gilliam. "I actually prefer working on location, because you can find little surprises along the way, things that might inspire you to think differently than you might in a very controlled [studio] setting."

A lover of jazz music, Gilliam says that he often tries to improvise during filming. Of course, such flights of fancy can be a bit risky on the kinds of large-scale projects that the director favors. "As a former animator, I've done my share of storyboards, but I've gotten more and more away from them," Gilliam asserts. "On this picture, I did hardly any at all. It's interesting to see if you can do things instinctively — to go to a location and see what's there on that day. Sometimes, when you preconceive things and think about them for three or four months, you get yourself into a trap. Of course, there are always some complex shots you need to plan out well in advance, but the danger is that you've spent so much time seeing them that you can become bored by the time you're ready to do them. Then again, quite often you may deviate from your plan at the last minute, only to realize, after you've cut it all together, that the original idea was the right choice after all!"

While canvassing the concrete-crammed urban landscapes deep within the two cities, Gilliam and his companions discovered a treasure-trove of bleak, forlorn sites perfectly suited to the story's aura of apocalyptic decay. Chief among these were Philadelphia's disused Richmond and Delaware generating stations, which had once supplied electricity to the entire city, and Baltimore's rotting Westport power plant, on the shores of the Patapsco River. Other Philadelphia sites included Memorial Hall, the last remnant of the 1876 centennial World's Fair Exposition, which was cast as a university lecture hall; the deteriorating Met Theater, which became a homeless enclave where Cole does battle with a pair of vicious vagrants; the Greek-revival Ridgeway Library, a once-majestic structure now awash in graffiti scrawls; the Eastern State Penitentiary, which was turned into a present-day mental institution; and Philadelphia's new convention center, which doubled as the airport featured in Cole's recurring dream. Says Pratt, "The kinds of places we ended up shooting at were disused theaters and ugly sections of town — abandoned places that had faded and fallen into disrepair."

Serving up the film's photographic recipe, Pratt relates, "The overall concept was that the people who were stuck underground were dependent upon a kind of underpowered, shaky generator that gives them tungsten light that's not up to par. There, we used a kind of sepia look with warm pools of light. When Cole goes above ground, he's in a twilight area of snow, a place where there are no human beings, just animals. It's a fairly simple look — cold, darkish, unfriendly daylight. Once we got into the everyday world of 1996, we went after a drab feel because of the places Cole and Dr. Railly encounter on their search for what actually happened to the world."

Pratt felt that Kodak's 5298 stock would be best suited to the task, and he used it exclusively. "I find that the 98 is adaptable to most situations," he says. "What happened to us time and time again, working during the winter, was that we'd start out shooting brightish days and then see it all go to ratshit at about three o'clock in the afternoon. I just stuck ND filters

on the camera when it was bright and took them off when it was dark."

Working primarily with a Moviecam Compact, Pratt outfitted the camera with his favorite set of old Cooke Series 3 lenses. To soften the razor-sharp images produced by the 5298, the lenses were fitted with black, 10-denier Christian Dior stockings. "Modern stocks are so sharp that if you're not careful, the images can take on an almost video look," Pratt opines. "The stockings just soften things up very slightly."

The filmmakers varied a bit from their general photographic approach while shooting Cole's haunting dream, which gradually unfolds over the course of the story. "The dream sequences were a very high-key affair," says Pratt. "But during the grading of the film, we worked with the interpositive and internegative to almost destroy the image for the parts of the dream leading up to its resolution. We printed very light and made an interpositive and internegative which we then overexposed even more. I think the printer lights were down to about 8. When Cole finally gets to the airport at the end of the film, the look goes back to being high key, with all of the detail put back in."

Pratt points out that color was used sparingly but selectively throughout the film, to provide a series of psychological "signposts" for the audience. "Mainly, I think one could say we focused on things that had had the color drained out of them," he notes. "But the story is a complete mixture of times and places, so we did occasionally use color to cross-reference between the various parts of the film. We didn't want the audience to be entirely sure which time our hero, Cole, was actually living in. The most striking example of this is when Cole is in a kind of hospital and happens upon a CAT-scan ward where we used a really strange, black-lighty blue. That look is echoed in other parts of the film as a kind of prod to remind you that you're never quite sure which bit is a dream and which is reality. To get the CAT-scan look, we plundered our old film bluescreen cupboard and got out these old Congo-blue filters which we stuck on HMIs. It created an almost tactile sense of blue, similar to the look we used for the story's time machine."

On his way to the Earth's surface, Cole, wrapped in a protective plastic "spacesuit," negotiates through a vast underground chamber. The space was actually part of Philadelphia's abandoned Delaware power station; to give it a sewerlike atmosphere, the filmmakers opened the facility's floodgates for the first time in years. Pratt took advantage of skylights by allowing real daylight to filter down through the overhead openings.

Plundering the Power Stations

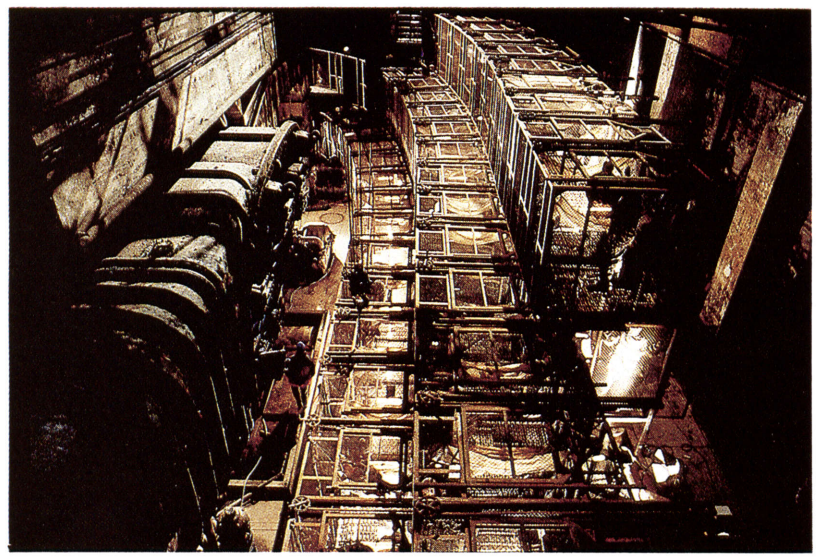
The outmoded power stations that Gilliam and Co. located on their scouts were used as a basis for a variety of setpieces, all of which combined to provide an extensive look at the underground world of the plague's survivors. Included among the futuristic settings were a network of jail cells; a flooded, sewer-like passage that leads to the Earth's surface; a confinement area in which Cole begins to question his sanity; a high-tech interrogation room where scientists de-brief Cole after his journey above ground; and an elaborate time machine that sends him hurtling back to 1996.

For Pratt and his crew, the primary challenge was to deal with the physical and logistical demands of these various areas. Elaborating on the sheer scale of the project, the cinematographer confirms, "It was all pretty frightening, really. The logistics of this picture involved controlling and enhancing the images in a situation where we had no rigs or places to put equipment. I had to call on a very good grip named Mike Miller, who had come to us very well recommended on *The Fisher King;* he helped us to do that film's wonderful sequence in Grand Central Station. On this project, he was able to black out 60- and 100-foot windows, build cranes that would carry 4K Xenons, and generally turn difficult places into workable, studio-like places."

Gilliam, for his part, admits that the epic scale of *Twelve Monkeys* caused him more than a few moments of misery. Unlike a drawing board, where it is always possible for an artist to give full play to his imagination, a film set

comes with built-in restrictions. "I hate making movies!" Gilliam thunders, tongue firmly in cheek. "I wish I could give it up and get a proper job. It's non-stop frustration. You're always fighting depression, because you start with very clear ideas and pictures in your head, big plans, and every day you have to compromise because of the reality of the situation. We confronted that kind of frustration every day on *Twelve Monkeys*. If I have any regret about the shoot, it's that we didn't quite capture all of the power stations on film. We had to limit ourselves to what was important for the story. I hate going into extraordinary spaces and not taking full advantage of them, but to do so might have distracted from the tale we were trying to tell."

Gilliam's caveat to the contrary, most viewers will be more than a bit impressed with the film's corrosive dystopian vistas, which offer a new twist on the screen-filling Orwellian futurescapes of *Brazil*.



The film's "future prison" was built into the Richmond power station by production designer Jeffrey Beecroft and his crew. Three levels of forced-perspective cages (shown here) were constructed to create a sense of depth, and the sequence was further enhanced with some digital manipulation during postproduction.

Maze of Cages

Before being sent on his fact-finding expedition, the convict Cole spends his time languishing in an 8' x 12' jail cell within a maze-like prison of the future, which production designer Beecroft designed to resemble a collection of human-sized "hamster cages." Set one on top of the other, like children's blocks, the cages were built in a well-like area in the Richmond power station. Roughly 100 feet high and 80 feet across, the space offered a series of walkways that provided a place to set up lights.

"Jeffrey constructed a row of about 10 cages which were then replicated in forced-perspective versions that went off 'round the corners to provide a sense of depth," says Pratt. "We built three levels of those, and in the final film they were augmented digitally by Peerless Camera Company, the special effects outfit that Terry formed some years ago with Kent Houston, the film's visual effects supervisor.

"The walkways were about 60 feet up, and we used them to support the Xenon searchlights featured in the sequence," Pratt explains. "On the upper story, out of shot, we added 20Ks that gave us a backlit definition through the cages. Then Crispian Sallis suggested to me that we could emphasize the perspective by placing small neon practical lights within the cages themselves. We also added luminous 2K blondes underneath the cages to underlight the various characters in their cells. Those gave the scene a really good feel."

Flood Lighting

When Cole is plucked from prison and sent on his assignment, his path from the sealed underground world to the surface takes him through a vast sewer-like corridor. The space was created by flooding an area of the Delaware power station that had formerly housed turbines similar to those at the Richmond site. The generating station's basement was actually below river level, and the space had regularly been flooded with river water during its operational period. Though it hadn't been done in years, the flood gates were opened once again to create the eerie passageway to the snowbound outside world.

"Spending winter in Philadelphia in a flooded power station is pretty difficult work," Pratt testifies, his voice leaden at the memory. "The entire crew suffered from the cold. We had intended to enhance some of that sequence digitally, but the images were so strong that we didn't need to do it. Our primary goal was to call attention to the length of the power station and give it a sense of scale. It was a pretty huge place anyway, but we let the back go black, and we threw some shadows along the sides to help create the feeling that this tunnel went on forever. We had about four Xenon lights, and the rest of the fixtures were 12Ks. We didn't have a Musco Light, because we couldn't get it anywhere near the set. Instead of covering up the location, we allowed soft toplight — real daylight — to filter down through skylights that ran the length of the ceiling, every 50 feet. I could control the amount of light coming down, and it gave me some ambient fill. It was almost like shooting day-for-night, but [the toplight] raised the basic exposure. We did experiment with reflections on the water, and there are a few in the film, but the architecture was pretty complicated, and when we complicated it more with dappled light, it seemed to ruin the scale."

Eternal Night

One of the film's most eye-catching sets was dubbed "Cell Eternal Night," an isolated room in the underground where Cole, returning from a time-machine misfire, begins to wonder if he is actually experiencing this strange re-entry ritual, or if he is suffering from delusions. The scene was played

out in a tungsten-based, enclosed 10'-square, 30'-high concrete chimney that was completely blacked-out. To reflect the character's unstable mental state, Pratt worked closely with camera operator Craig Haagensen, who plays an integral role in Gilliam's English approach to the decision-making process. (In the British tradition, directors consult with both the operator and the "lighting cameraman" on matters involving cinematography.)

"The chimney cell was an extremely difficult location," Pratt attests. "It's a wonderful sequence, echoing the kind of paranoid state Cole is in. Craig did a lot of the close-up work by hand. We were shooting at the bottom of this 30-foot shaft with a roving, handheld, dutched camera outfitted with a 10mm lens. Sequences such as this were one reason we used the Moviecam, which Craig could hold for a long period of time. We were intending to do a lot of handheld stuff, and the Moviecam has an orientable viewfinder which allows you to work from either side of it. It was easily converted to [handheld] mode, and it allowed me to use my Cooke Series 3 lenses.

"We were trying to capture the look of a man in some kind of internal torment, and my job was to make sure we saw what was happening on his face. The trick was to survive each shot, carefully keeping the mood but adjusting the lamps as much as I could. The camera was observing Bruce Willis, but it was also seeing everywhere at once. For much of the sequence, I actually followed Craig around with some fill, whether it was just a small, battery-operated lamp-head or a lamp-head with a piece of white card. The look involved simple stuff like that, plus top light filtering down. We didn't often see the top of this tube, which helped, and there was also one part of the set that we could hide small lamps behind. Basically, we lit the scene with 5Ks, mini-Moles and some other small fixtures."

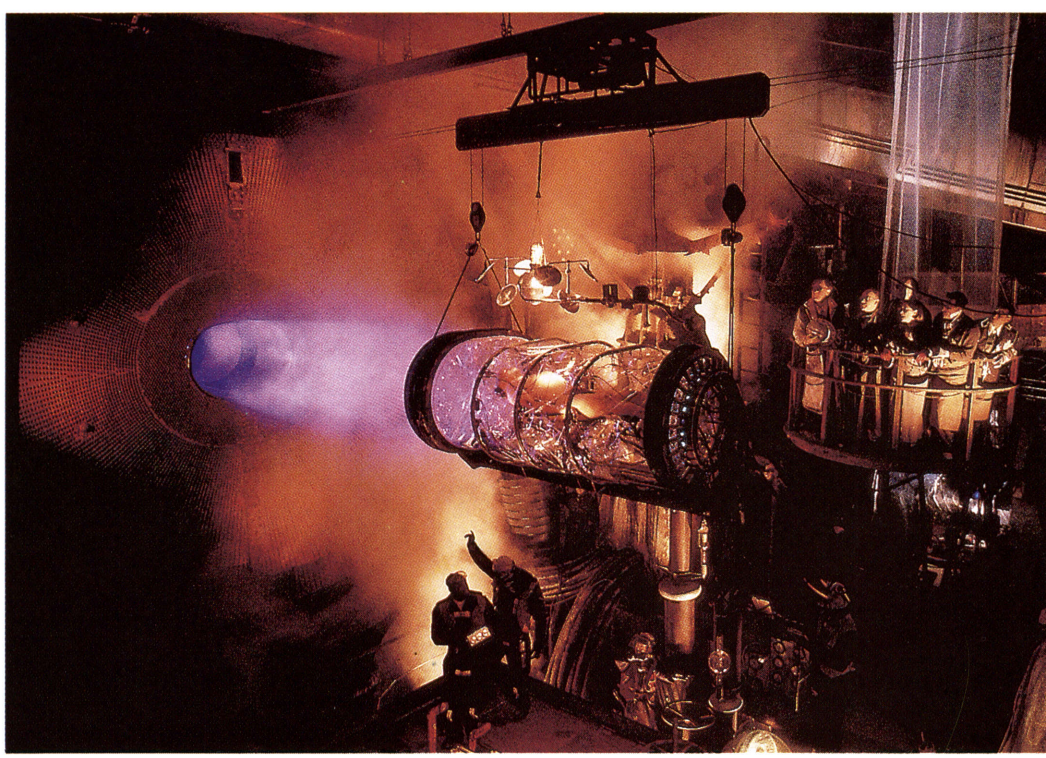
Elaborating upon the wide, dutched look that Gilliam favored not only for this sequence but throughout the film, Pratt says, "That strategy was particularly effective in the chimney cell sequence. Dutch angles can often be annoying or noticeable, but Craig was very clever in making them organic to the entire picture. We also used wide angles throughout the picture, but Terry frequently shoots close-ups on a 17mm lens, so our use of wide angles doesn't stick out as much as it might in a normal film, where you'd be shooting close-ups on a 70mm lens. Terry is not in the business of doing those kinds of glamour shots. Our primary range on this picture was from 10mm to 17mm! We very rarely put the 5:1 zoom on the camera, and I don't think we used anything longer than a 100mm lens. Basically, the wide angles we used were all part of the general thrust of the film. It's a difficult look to maintain, but I think Terry and I have done well with it so far. Long lenses can be easier to use, but once you're into the wide angles, it can be difficult to break from that mode."

Asked about his proclivity for wide lenses and somewhat demented, off-kilter framing, Gilliam emits a wry laugh. "I think it's just the way I am; being an ex-cartoonist, I see things in a slightly grotesque way, and wider lenses tend to capture that viewpoint. I like the distorting effect, and I like the way a wide lens bends architecture and forces perspectives; things look deeper, and the scale of things is altered. I also like what it does to people.

"My visual fetishes do make things a bit hard on Roger and the crew," he concedes. "If you're shooting with long lenses, as most people do, you can put lights anywhere. Because Roger and I have worked together since *Brazil*, he's gotten very good at hiding his lights; I probably take him for granted now. It's also much easier to create a composition with long lenses, because everything is on one plane; anything you're not interested in stays out of focus. It's simpler to work that way, but I have an obsession with wide-angle lenses. We always work as wide as possible, but at the same time I don't want it to *look* as if we're using wide-angle lenses. So it becomes a kind of game, to see how far you can go without alienating the audience. To me, using a wide lens creates more of a feeling that you're *in* the film than a long lens does. The whole scenario is around you when you look through the camera."

The Engineering Room

Gilliam was able to indulge his particular visual appetites to the fullest on the set of the Engineering Room, a bizarre space



With Cole embedded in a chrysalis-like tube, the scientists insert their explorer into the time machine that will send him back to the year 1996. Working in one of the disused Philadelphia power plants, Beecroft's crew cut an oblong hole into a corroded condenser. Pratt used smoke and a Xenon unit to create the futuristic shaft of light.

Above: ***A shaft of golden "daylight" underscores the pathos as Cole's sanity is evaluated in a mental institution.***
Right: ***A fellow mental patient (Brad Pitt) gives Cole a piece of his mind.***
Opposite page: ***Having made it to the dead world above ground, Cole begins searching for clues to the plague that has wiped out most of humanity. Pratt tried to fashion a "cold, darkish, unfriendly daylight" look for the exterior scenes of Cole's journey.***

where the scientists interrogate Cole about his trip to the planet's surface. The scene was played out in the Number 4 turbine basement of the Westport power plant in Baltimore. Strapped into an aluminum chair that rises 12 feet off the ground along a rusty metal wall, Cole confronts both the scientists and the constantly probing Video Ball, a suspended, gimbal-mounted contraption that contains a glowing array of 15 television monitors. In addition to playing back a series of images — Cole's face, the scientists, and different slides — the various monitors also bark questions at the story's beleaguered hero. Inspired by a particularly disturbing Labias Woods sketch, the ball was created via the collaboration of production designer Jeffrey Beecroft, special effects wizard Vincent Montefusco, video assist expert Ian Kelly, and electrical engineer John Schmidt.

"A television screen can only be so bright, so when you go into a scene involving such screens, you have to build the rest of the lighting around it," Pratt says. "I would always think of a medium-bright television screen on 5298 stock as being around the 4 area in terms of f-stop. You have to do some testing, but I'd say it's about a 4, give or take a few half-stops. Therefore, everything has to be pegged to that level for the images to be in their proper place on the luminance scale."

The task was complicated by the scene's other photographic requirements, but Pratt managed to solve his problems by using the ever-reliable Louma Crane. "There was a pretty solid concrete shelf above and around the set, so we could place the Louma crane on it and poke it downwards 25 feet. Terry did these wonderful probing shots with it."

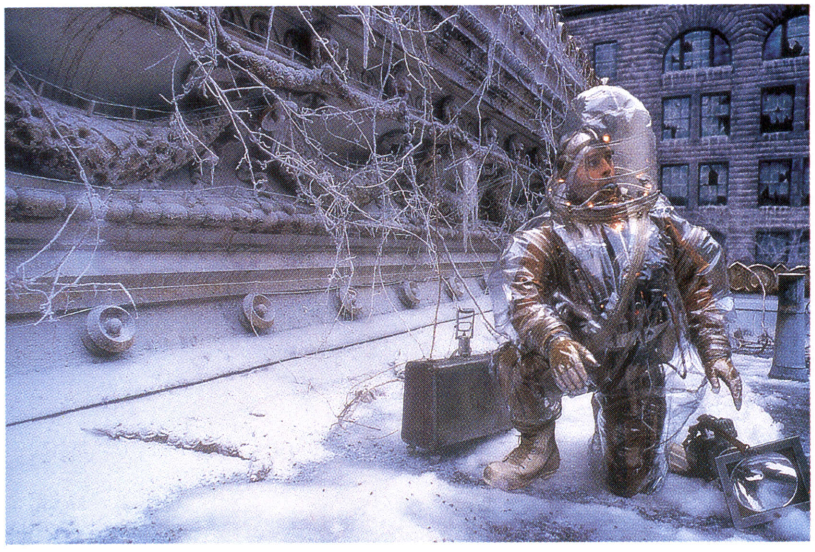
With the help of practical fixtures built into the set by Crispian Sallis, Pratt was able to achieve the wide-angled shots his director so loves. "Crispian had an 'Aladdin's cave' of lamps that he had found, scrounged, hired and purchased," Pratt says. "He managed to load many of the sets with practical lamps. On another set dubbed the 'Tiny Chamber,' he had green-biased fluorescents underneath the desks in the room, 12-volt quartz lights in the seats, and 'architectural lights' on all of the machinery. It was a complete mixture, but I let that go because I knew I could light the faces with my own fixtures and get the skin tones the way I wanted them. The other lights were all in the background."

Building a Better Time Machine

The time-travel device itself provided the film with a spectacular visual centerpiece that blends a real-world location with the film's futuristic scenic and lighting designs. Gilliam found his time machine during the location scout, while visiting the Richmond and Delaware generating stations. The cavernous structures date back to the 1920s and still house the rusting remnants of several enormous turbine generators that once produced hundreds of thousands of kilowatts of energy. Fascinated by the huge turbine halls and the 18-foot steel condensers within them, Gilliam decided to turn the outdated machinery into the elaborate time trigger that sends Cole back to the year 1996.

Transforming the location into a futuristic "launching pad" required intensive logistical endeavors by the crew. To create the time machine's entry tube, which was intended to resemble a CAT scanner, Beecroft's construction team cut an oblong hole into one of the corroded condensers. Once the generator area had been altered and dressed, Pratt and his crew stepped in and used their lights to sculpt an appropriately ominous ambiance.

"The time machine sequence illustrates the difficulties of shooting in a real location," says Pratt. "In addition to cutting an



opening through quarter-inch plates of steel, we had to find a way to illuminate this whole structure."

Crispian Sallis once again stepped to the fore by providing Pratt with a variety of fixtures that could be incorporated into the set, thus allowing the cinematographer to avoid the task of hiding lights. "With a bit of fiddling, we could establish a basic exposure level," Pratt notes. "As far as the stop was concerned, we were generally right at the end of the zoom, which was about a 3."

As a final touch on the time machine set, Pratt installed a filtered Xenon unit in the oblong tube created by Beecroft's team. The powerful lamp created a strong bluish beam of light that streamed forth from the tube's circular opening, illuminating the chrysalis-like gurney enveloping Bruce Willis as he was inserted into the machine.

Loony Bin

After Cole is sent back to 1996, his dire predictions about the future lead authorities to surmise that he is stark raving mad. The time-traveling convict is soon packed off to a mental institution, where he makes the acquaintance of fellow patient Jeffrey Goines (Pitt). Doubling as the funny farm was Pennsylvania's imposing Eastern State Penitentiary, whose interior offered a circular rotunda from which seven identical one-story cell blocks branched. "Terry felt that these corridors were a very strong graphic, and we persuaded the authorities to allow us to give the place a slightly 'lived-in' look," Pratt recalls. "We basically had a central skylight above the area where all the action happens, and we ringed it with scaffolding. I allowed daylight to penetrate and to change. We went for a bright, overexposed look with the faces of the patients slightly underexposed against walls and then corridors, which went off into brightly lit doors. There were three corridors on one side, and the other side was fairly darkish, like the rest of the institution's interior. We also did some night scenes in a hexagonal room we created by revamping the rotunda area and adding low ceilings.

"For the daytime scenes, we used two Xenons to create shafts of light. If the daylight wasn't good enough, or if it wasn't coming from the right direction, we projected 4K HMIs through [diffusion] frames to allow for matching. We would then scrim off the daylight and use our own lamps.

"At night, we went to tungsten. The night scenes were shot during the day, so all the windows were tented out; we would aim 2Ks and mini-Moles through the windows, and used half-85s to warm things up and provide a kind of neon streetlight effect. Then we shot 5Ks and 10Ks down the corridors, playing them off the stone floor, which created a nice effect.

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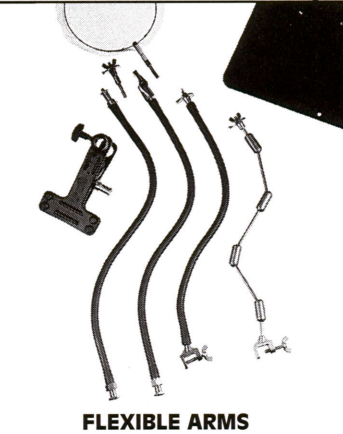

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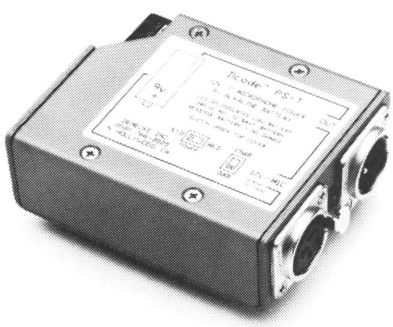

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While shooting the film's climax, in which the meaning of Cole's dream is finally revealed, the production team faced extensive headaches in Philadelphia's brand-new Convention Center, which was re-dressed as an airport.

"There were two areas we used in that particular location," Pratt reveals. "One was the concourse, which had windows and was open to daylight. We had to organize our schedule so that we weren't on any wide shots when the light fell, because you could see a window from just about every angle. The other spot, where the dream occurs, had to be treated differently. We did those scenes in a walkway that led to the planes. My problem was that the footage there was supposed to be high-key and shot at high speed. The actual place was lit with fluorescents, and the corridor was 100 yards long and 30 feet wide. We had to trace the end of it and completely blast that area with 4K Arri Suns to give it texture. Then we had to replace all of the fluorescents in the ceiling. Steve Litecky, a local gaffer we had signed on to help my regular gaffer, Chuck Finch, really helped us out with that. We were lighting the main concourse with HMIs, and we needed to replace the fluorescents with lights that had a coldish feel. We went with little 12-volt lamps that had a slightly dichroic reflecting surface. Banks of those were hidden near the roof within the wall spaces to light the ceiling, and we tricked things up a bit with extra lights hidden down the corridor. I had to build up my exposure so we could shoot between 96 and 120 frames per second and still get enough on the negative to print it up."

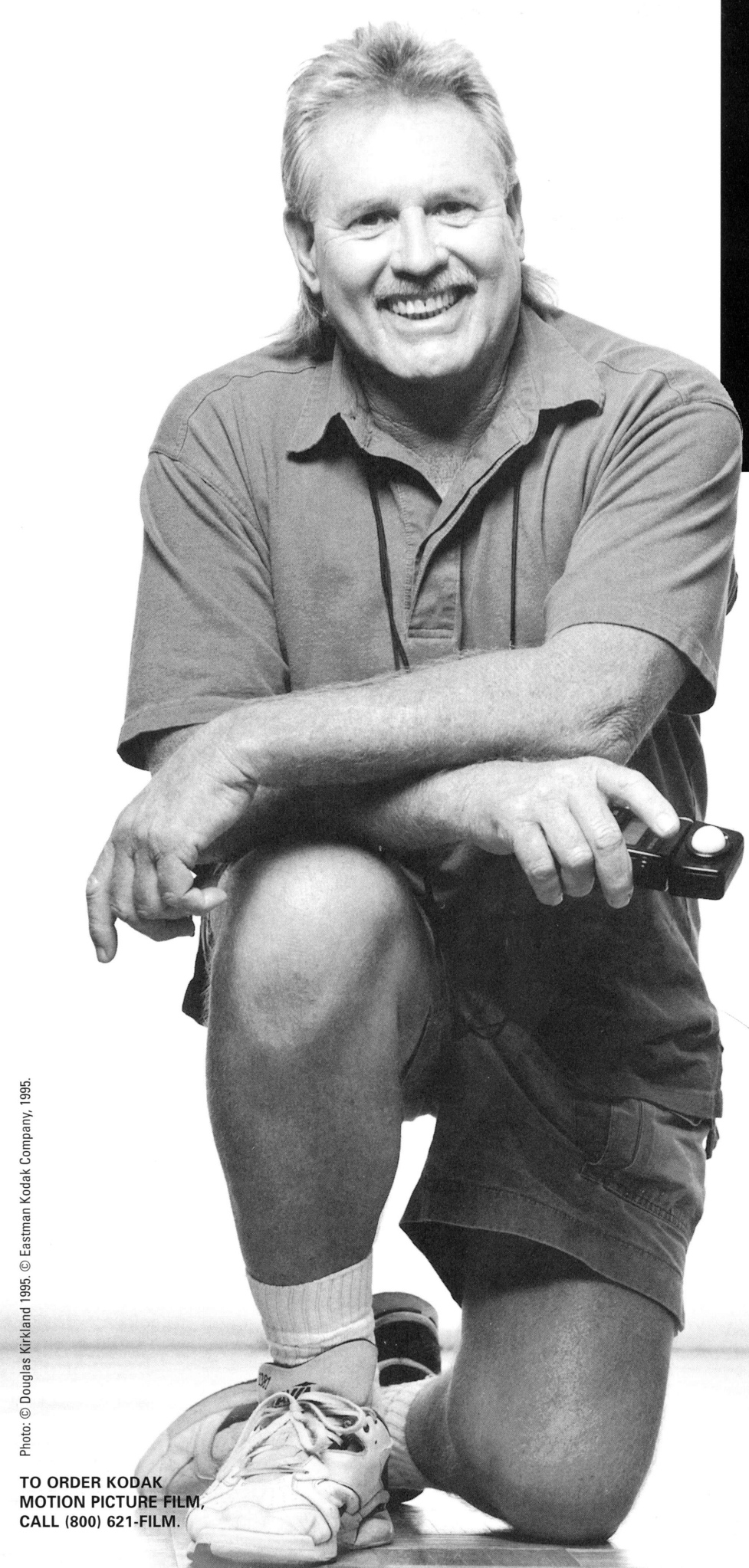
> "I suppose it might be easier to just go out and do commercial films, but it wouldn't excite me in the same way."
>
> — Director Terry Gilliam

Final Thoughts

Having survived the workload of *Twelve Monkeys*, Pratt credits Gilliam for having the intestinal fortitude to continue chasing his ambitious screen dreams. "I think Terry really enjoys the visuals such stories lend themselves to," the cinematographer surmises. "He's an optimist, and he's got incredible energy. He's very passionate about cinema images, and I think that shows in his work. After *Baron Munchausen*, he got a very unfair reputation as a wild spender, but what happened with *Munchausen* really wasn't his fault. Prior to that, he brought in *Brazil* a million dollars under budget, and *Time Bandits* was also very affordable. At any rate, when he does spends studio money, it certainly ends up on the screen."

Addressing this same point, Gilliam notes, "This picture is also by Universal, the same company that gave me all the problems with *Brazil*!" Pausing to allow himself a hearty guffaw, he dryly adds, "The irony was too great for me to pass up. It seems to be very difficult to burn bridges in Hollywood."

Pondering his never-ending quest for epic imagery, Gilliam offers, "When I was a kid, I watched all of these epic films that took me to other places and other times. That's really what it's all about. I keep wondering why I keep making life difficult for myself, but I can't seem to help it. I need to find a challenge, to try to do something that I haven't seen before. *Twelve Monkeys* was an easy choice, because the script was very intriguing; I couldn't believe it had actually made it through the system. I suppose it might be much easier to just go out and do commercial films, but it wouldn't excite me in the same way."



ROLAND "OZZIE" SMITH ON FILM

"Cinematography is like putting a puzzle together. It's an art, but you also do a lot of mechanical things. You work with great people on the cast and crew, but you also have to be true to yourself. Sometimes you have to tell an actress, 'Trust me, I'm lighting you from that side so they can see that tear in the corner of your eye.' I was in heaven the day they asked me to shoot *Dr. Quinn* with Jane Seymour. I've always loved John Ford's Westerns. I remember how those films pulled me right into the screen. I try to create that feeling of depth on a flat TV screen. I want the audience to forget they're at home and feel like they're walking with the actors on the streets of an old Western town. We use soft light in the foreground and harder and harder light as you get deeper into the background to create a feeling of depth. We shoot a lot of exteriors in 100 degree heat with the sun at 12 o'clock. Jane still looks beautiful. We film her in soft light with Kodak's 7245 t-grain film and the sharpest lenses. She doesn't need diffusion. I put my heart into this work. That's one of the rewards you get for being a cinematographer. Every day you do something you love."

Roland Ozzie Smith

Roland "Ozzie" Smith earned a 1993 Emmy and the ASC Outstanding Achievement Award for his work on *Dr. Quinn: Medicine Woman.* His other credits include the *Alien Nation* TV series and many TV movies and pilots, as well as *Street Justice* and other features.

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Hot Set

Director Michael Mann and Italian cinematographer Dante Spinotti, AIC transform the mean streets of Los Angeles into a deeply-hued crime milieu for *Heat*.

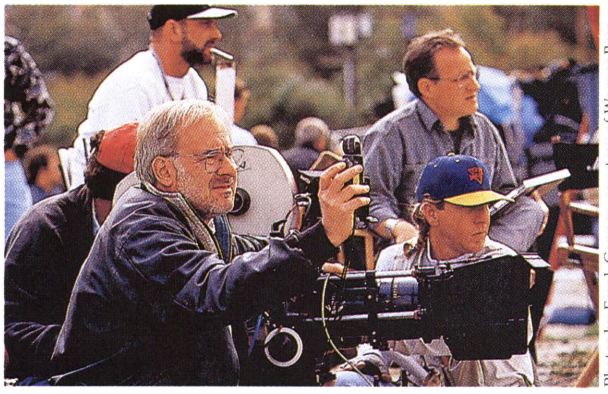
by Les Paul Robley

"LIKE NO OTHER ART FORM, FILM lives on reality," says Dante Spinotti, AIC, the director of photography on Michael Mann's latest film, *Heat*, a crime thriller that showcases first-time co-stars Al Pacino and Robert De Niro, along with Val Kilmer and Tom Sizemore. "The more you believe an act happening on the screen, the more you believe the story, and the more successful the communication will be between the storyteller and the audience."

The cinematographer also followed this philosophy while shooting Mann's two previous feature efforts, the lush period adventure *The Last of the Mohicans* (which earned Spinotti an ASC Award nomination) and the stylish serial-killer thriller *Manhunter*.

Spinotti grew up in the northern Italian Alps before being sent to Kenya to do odd jobs for his uncle — a cinematographer. Learning the craft, Spinotti's subsequent operating jobs back at RAI in Rome helped develop his cinematic acumen. Freelancing and hoping to break into the Hollywood arena, Spinotti was offered his chance by famed producer Dino DeLaurentiis, resulting in his collaboration with Mann on *Manhunter*. The cinematographer's credits also include *Beaches*, *The Comfort of Strangers*, *Crimes of the Heart*, *Frankie and Johnny* and *True Colors*.

His third pairing with Mann, *Heat* examines life and crime in Los Angeles at close range, following the story of LAPD Lieutenant Vincent Hanna (Pacino) who confronts Neil McCauley (De Niro), the ringleader of a group of professional thieves. Using an approach based on strict realism, Mann takes this material and transforms it into images consisting of abstract elements which support the film both visually and emotionally. "It's a little like being in front of a Caravaggio scene and changing it into a Kandinsky painting," explains Spinotti of the director's visual process. "This is achieved by a very accurate control of the dynamics of the composition, and the use of lenses and camera moves, set design, set dressing, costume design, hair, makeup, props and the color of the light — which is widely discussed and tested in preproduction. This intense preplanning, which will find its way into the editing, is the foundation."



Photos by Frank Connor, courtesy of Warner Bros.

Spinotti checks his light. Shooting exclusively with 5298, the cinematographer augmented existing sources to create* Heat's *sense of amplified realism. He found the 500 ASA stock versatile enough to be used all day long in any lighting condition.

Since most of the film takes place at night, Spinotti shot some comparative tests with ENR processing on the positive print at Technicolor Labs. "John Bickford printed some incredible images of downtown L.A. at night," he explains. "With ENR, the blacks are deeper and the whites are whiter. The process allowed us to time up the positive three to five points, as if the shadows became one full stop brighter. The streets of L.A. at night, shot without any artificial lighting, had a glow which recalled scenes from Stanley Kubrick's *Barry Lyndon*, which was shot in candlelight with a lens T-stop of 0.7."

However, the process system, invented in Italy by Technicolor timer Ernesto Novelli and often used by Vittorio Storaro, ASC, AIC as a necessary complement to his lighting, slightly desaturates color, which can cause a problem if one needs the full red-blue-green range. "Because of this desaturation, we decided instead to shoot the movie without using ENR," Spinotti explains. "But still, these bright-dark images stayed in my mind as a guideline to the lighting of the city at night."

Liking the hard visual edge it would add to *Heat*'s dark story, Spinotti chose to use Kodak's 500 ASA 5298 stock for the entire film. He explains, "I pushed the film one stop for night exteriors and interiors. This allowed me to have the downtown backgrounds at some level of brightness — shooting at T2 on Panavision's Primo lenses — and have some extra brightness when needed using the excellent [Super High Speed] T1.1 50mm lens." He actually set the exposure on the 50mm at T1.4 to correct some lack of sharpness on the top and bottom of the anamorphic frame.

"At 800 ASA, I also didn't need to increase the light dramatically on given shots at night when we needed longer lenses, such as the [E-series] 180mm at T2.8; the 400mm at T3.5; and the [11:1 and 5:1] zoom lenses at 5.6," he continues. "For day exteriors, most of the time we had to complete shooting late in the day, when shadows from the buildings and the use of long lenses or zooms required a high-speed film anyway. Because of its low grain and color, the 5298 enabled us to use it throughout the day without having to change film stock when the light went down.

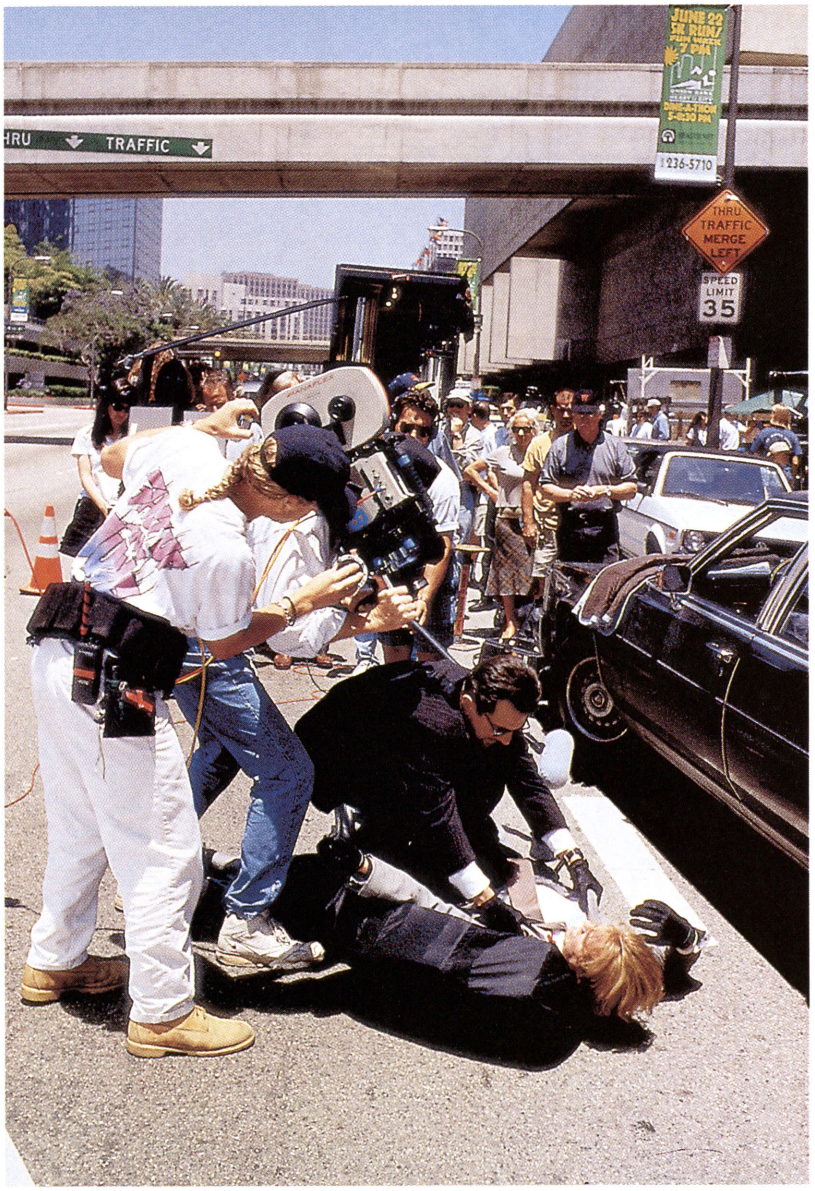
Pushing 5298 one stop does not give me heavier grain or contrast than, say, the old 5296 [when exposed normally.] And one more stop is a major advantage on a movie that is shot almost entirely on location."

Remarking on how the anamorphic format also helped reduce grain, the cinematographer observes, "The bigger area of the negative makes this choice really useful."

Spinotti shot the tungsten-balanced 5298 in daylight without 85 correction filters, explaining that this gives him an extra edge on the brightness of the blue-greens, while still keeping the whites and grays very clean. It also forces him slightly off the stock's standardized color palette.

For one of *Heat*'s late-night robbery scenes, shot downtown in L.A.'s commercial area, the crew filmed exteriors using multiple cameras aimed at various angles. The area itself was generally lit by yellow sodium street lamps. "Period movies are simplified in the light sources — the sun, the moon, oil lanterns, bonfires — whereas modern films are lit by a number of sources," theorizes Spinotti on the issue of natural lighting environments. "Sun reflects on the glass walls of tall buildings to create rays coming randomly from different angles. At night there is an abundance of fluorescents of different colors and tungsten luminaires of many shapes. The city streets are lit by yellow sodium lights, blue-green metal-halides and the older green mercury-vapor lamps."

To supplement these existing sources, he used "a combination of 10Ks or Par lights on Condors, or even Dino lights, set low on a dimmer to match the color of the sodium light. If more intensity was needed, one layer of Rosco CTS again brought the color temperature down. But more interesting was the blue-green hue of metal-halide, or the slightly greener mercury-vapor. In preproduction tests we found a gel pack that matched the HMI and the tungsten to the metal-halides or mercury-vapor colors. We added CTB to the indication of the color temperature meter to achieve a softer, denser look on the film, and to shift the green more toward blue than yellow."



Criminal mastermind Neil McCauley (Robert DeNiro) takes down fellow thief Chris Shiherlis (Val Kilmer). In order to capture Mann's realistic vision, the production was shot almost entirely on location in Los Angeles.

For location interiors, gaffer Jim Grce used batstrips — a line of 75-watt bulb spots arranged in close pattern — on the corners of the ceilings. A good tool for small interiors, batstrips are easy to hide, and when used on individual dimmer lines, the lights can be placed above frame just out of camera range for a very soft but directional sourceless light that can become fill, backlight, or even a key light.

"I see a tendency not to light individual shots, but rather areas of the whole scene," Spinotti says. "This is so cameras can shoot from different angles at the same time for cutting dynamics and the actor's performances."

According to Spinotti, this is made possible by the smaller sizes of more powerful and dimmable Par lights, such as the agile De Sisti HMI, the tiny Dedolights, Kino Flos and small tungsten open-face Fresnels. In addition, the quality and latitude of modern film stocks, better cameras and faster lenses will also make a considerable difference in the way films are photographed in the future.

Although *Heat* did not need special effects cinematography to convey its story, computerized special effects and digital compositing technology were used to address lighting and composition problems for scenes which could not be photographed traditionally.

McCauley consoles Eady (Amy Brenneman). The night sequence, set on an open terrace, was shot against greenscreen so that the background panorama of city lights and sky could be perfectly sharp. In Mann's quest for authenticity, the greenscreen backing was set up at the actual location.

For one of these, a long romantic night scene between De Niro and actress Amy Brennemann on a terrace overlooking the Hollywood Hills, the dialogue makes reference to the ocean of city lights lying all around them. Spinotti suggested to Mann that they shoot the sequence against greenscreen to maintain the sharpness and brilliance of the backgrounds, and still add the night sky with its veil-shaped winter clouds. He was also concerned about the exposure and in obtaining a consistent look over the number of days of shooting.

"Camera operator Gary Jay, first camera assistant Duane Manwiller, a small electrical crew

Digital Effects Add Visual Flash to *Heat*

Creating the final sequence in *Heat* involved digital compositing, as Lieutenant Hanna (Al Pacino) chases master criminal Neil McCauley (Robert De Niro) into a wide open area at the head of an LAX landing strip. The scene becomes a cat-and-mouse game which ends in a hail of gunfire as passenger jets scream overhead. Neil Krepela, a visual effects supervisor at Boss Film who has worked on several science-fiction epics including *The Empire Strikes Back*, oversaw *Heat's* greenscreen principal and background plate photography.

"For that scene, director Michael Mann was very, very concerned about the composition of his actors, most notably De Niro, against the landing lights in the background," Krepela indicates. "The whole idea is that the lights provide a brilliant background that De Niro tries to use like the sun — as a blinding shield he can emerge from to shoot Pacino. What Mann wanted was this compressed feeling, cheating reality, because it's a heightened moment in the story. To accomplish that, we ended up shooting the greenscreen and the background with two different focal-length lenses."

Compounding the problem further, most of this final confrontation was filmed with two cameras, one a motion-controlled pan-and-tilt gear head and the other wild without motion-control. I personally operated the Kuper RTMC130 motion-control software using stepper motors and Centent drivers provided by Boss. A follow-focus control proved unnecessary since the backgrounds would later be photographed at infinity to maintain a crisp sharpness between the foreground action and the background, both filmed using long lenses. The pan-and-tilts were operated remotely by a hothead, with the movement information encoded into Kuper software as separate takes. These were saved onto floppy disks for later playback when, months later, the background plates were shot in the same location. This time delay enabled director Mann to obtain a final cut of the scene, so only those selected takes needed to be digitally composited.

A bloop light was triggered on the first frame of each take to use as a synching point for the foreground and background elements. Takes were made at 30, 60 and 120 frames per second in order to create the heightened effect Mann desired.

"The motion-control shots weren't used in the final cut," Krepela confesses, "but a number of the second pan-and-tilt moving camera shots were. To replicate the very long-lens look that Michael liked of the landing lights behind his actors, we shot the plates with a somewhat shorter focal-length lens, with the intention of blowing that up in postproduction, tracking the greenscreen moves and applying that tracking to the background to obtain a married-up element. Dante [Spinotti] used anywhere from a 100 to 180mm lens on the greenscreen De Niro elements.

"Ironically, it was all shot high-speed, but the slow-motion look again wasn't what Michael wanted, so we ended up skip-printing a lot of that film back to 30 fps. [That process] actually enhanced the action; it added a sharpness, especially when the bullet hits go off and the blood bags burst — you see that a little more clearly."

Continues Krepela, "To compound that, we digitally enlarged the background to approximate the look of a 300mm lens."

Since the rest of the sequence was shot on 5298, pushed one stop (Spinotti's formula), the background plates could be shot on 5293 and processed normally, which kept the grain from becoming too apparent under such a large lens. According to Krepela, after the footage was enlarged, it would more resemble the pushed 5298.

Boss Film's postproduction crew then had to realign the runway shootout sequences, without being able to re-track the selected take with the motion-controlled camera move. Explaining the procedure, Krepela says, "We tracked the foreground object and put that tracked move into the background. We first did a bunch of temps at Editel in low-resolution

and I went out on the terrace to shoot tests and plates towards the east, south and west for specific compositions pre-determined with the director," Spinotti explains. "I basically shot the skies at T2 on Primo lenses, pushed one stop and shooting at 4 frames per second. I then shot the city lights at 12 frames per second, pushed one stop at T2. Then with simple lighting, and again with specific camera angles and heights, we shot two stand-ins against greenscreen. We then moved to postproduction.

"At Encore Video we put together a number of shots that combined background plates of the clouds, the city lights and sky.

for a screening of *Heat*. The negative was transferred in telecine in D1 and put into a Quantel Henry; we then tracked and composited all of the shots on D1. The Henry has tracking systems built into it, quite like the Flame; they basically assign a target point on the background greenscreen. We just placed little green tape cross-marks on the screen. The software recognizes these and continues to track and record information on each movement very, very accurately. Then you just apply that to your background move once you've sized it, and it locks right in. The result was taken to Pacific Title, where they up-rezzed it and output it onto film. We did three redos on that because the film was being cut as we were preparing these temps for the preview."

The other advantage to using digital tracking over motion control is that one doesn't need to scale the move when changing to different focal-length lenses. Krepela was dealing with a flat digital image and simply copied whatever the foreground move did over to the background.

"Motion control really wouldn't have worked using a longer lens," Krepela concludes. "The test we did ascertained that. To finish the final shot, we will digitize everything at Pacific Title at a very high-resolution. We'll blow it up, and again, move it around, hoping to match the 5298 background." —LPR

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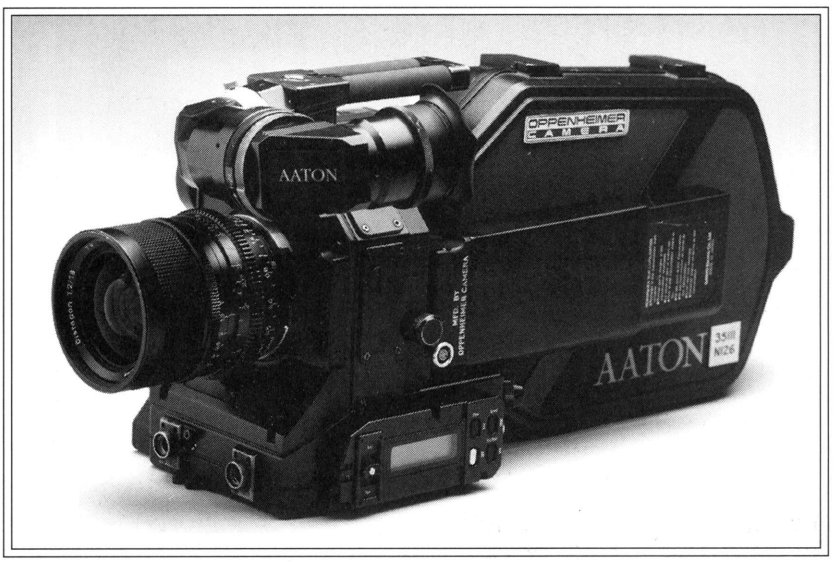

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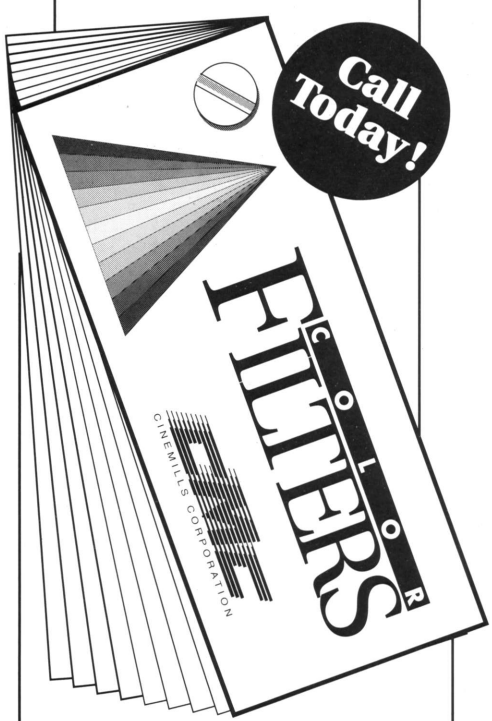

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[They were shot with varying focal lengths], say, a 100mm and a 50mm lens, creating a strong, romantic pictorialism. We also composed using more traditional combinations of lenses. The two profile side shots which carry focus from the foreground characters to the background seem to be a visual key that really delivers what the scene has to sell."

Mann wanted to photograph the actors against greenscreen at the actual location on both nights of scheduled shooting. To control the light coming from the city and the house behind, Spinotti first lit the actors without a greenscreen at a level of T4.7 in order to maintain some sharpness on their faces. The greenscreen was then brought in and lit to key level before the crew was to shoot.

A similar approach was taken with a sequence shot atop a high terrace overlooking Pacific Palisades at dusk. "The advantage [in using the digital process] is quite evident," Spinotti points out. "You can go through a number of takes to have the best performance from the actors, without a change in the brightness of the backgrounds.

"On *Heat*, we had plenty of opportunity to capture the majestic backgrounds of the city at night. In another scene, Lieutenant Hanna walks to a downtown hotel where a prostitute has been murdered. We achieved the first part, which takes him to the dead body in an alley behind the hotel, with a dolly shot employing a 50mm high-speed lens at T1.4. In that wide shot, he kneels down by the body, which is covered by a yellow plastic police bag. He has dialogue with a forensics expert who is also kneeling beside the body. Towering in the background are the tall downtown buildings. A helicopter hovers above them with a search light glaring behind the actors. [To cover the dialogue] we then used a two-camera setup over each actor's shoulders, with two zooms at almost 180 degrees."

Detailing the lighting setup for the sequence, Spinotti explains, "In the back alley, gaffer Jim Grce and I decided to install a Dino light at a high angle on a Condor with a metal-halide green gelpack and a diffusion frame in front. The Condor hovered above the hotel building high out of frame for the wide master dolly at T1.4 on the 50mm lens. Only two bulbs were lit. When we moved to the zoom coverage, the Condor was considerably lower and all 24 bulbs were now lit, so that our light meter read T5.6 for the zooms without any color temperature change. Likewise, two Mini-Brutes with diffusion were placed on the ground behind a honeycomb frame to add a white key light to the faces of the actors with the proper cross angle. These lights also operated on a single bulb for the wide master, and with all nine lights for the zoom coverage."

Toward the end of the film, Hanna chases and stops McCauley on a freeway. For this scene, in which the cop comes face to face with his criminal nemesis as squad car lights flash all about them, the glow of sodium-vapor freeway lights was reproduced by a Dino light set low on a dimmer and aimed through a Nightsun diffusion frame. The big unit was parked well out of camera range on a side street running parallel to the freeway. A Steadicam move (executed by operator Jim Muro and assistant Chris Mosley) then tracked Hanna getting out of his car and walking to McCauley's vehicle. "The T2.0 75mm lens gave the feeling of a video newsreel camera covering some gritty police activity," Spinotti describes, "especially with that single yellow source hanging above McCauley's deadly-looking black car parked on the street."

Cut to a modern Los Angeles diner, where we next find Hanna and McCauley having coffee together. The background set is a sober but elegant black-and-white design. De Niro and Pacino are seated at a table facing one another in a tense confrontation. "We photographed them at the same time, with the two cameras barely missing each other," the cinematographer recalls. "We lit them with a very simple pattern: a Chinese lantern on top between the two, and a 10K with a Chimera and honeycomb for each actor just out of camera range as a three-quarter key. We added a little fill and a Dedolight over their eyes. Their great acting did the rest."

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An *Unforgettable* World of Light and Shadow

Director John Dahl and cinematographer Jeff Jur recall the dark vision of their previous neo-noir for a science-fiction-tinged mystery.

by Jean Oppenheimer

FEW SCREEN SIRENS HAVE STIRRED UP audiences quite as much as Bridget Gregory, the black-hearted femme fatale of director John Dahl's neo-noir thriller *The Last Seduction* (1994). Cleverly plotted and stylishly conceived and executed, the film brought long-overdue attention to Dahl (*Kill Me Again*, *Red Rock West*), cinematographer Jeff Jur and actress Linda Fiorentino. Now the trio has reteamed for *Unforgettable*, a gritty murder mystery with a sci-fi twist which casts Fiorentino in a totally different role, but retains many of the earlier film's stylistic flourishes.

"John kept saying, 'Big-city crime movie — this movie should look like a big-city crime movie,'" recalls Jur. "To me that meant gritty, shadowy and wet. We wet down just about everything. Plus, you want to get as much of a sense of the urban environment as possible."

Unforgettable concerns a medical examiner (Ray Liotta) who is suspected of murdering his wife and is trying to track down the real killer. Fiorentino portrays a scientist who has developed an experimental serum which, when injected into Liotta's body, allows him to experience the memories of his dead wife and other victims of the killer.

"The movie is the Liotta character's search for the truth," continues Jur, whose other credits include *Dirty Dancing*, *The Big Picture* and four pieces for PBS' *American Playhouse*. "He almost never stops in the film and neither does the camera." The cinematographer estimates that 80 percent of the shots in *Unforgettable* are moving, sometimes so slowly as to be almost imperceptible. But that deliberate motion created just the subliminal undercurrent of tension the filmmakers were seeking.

Cinematographer Jeff Jur (in black cap) and director John Dahl (in white cap) confer on location. Like many great noir films of the past,* Unforgettable *makes use of low angles for dramatic impact. Jur relied on a Panavision Low-Angle Prism throughout the shoot.

Heightening the film's drama was the placement of the camera, which Dahl wanted as low to the ground as possible. "John likes that dynamic of being low all the time," says Jur. "Everything is at waist level or below. It's like a different movie on the ground; you're suddenly dealing with a lot more foreground — tables and furniture, seeing under chairs. It creates a real sense of depth.

"Often we would start low, looking straight across a floor, and as we made our move in on someone it forced us to tilt up. That creates a whole other perspective, because as you're moving in you're going from one view of the set or space to another one. You're now looking up." The tilts were never so exaggerated, however, that they took away from the sense of realism Dahl wanted for the picture.

In order to get the camera (a Panavision Gold II and later a Platinum) as low to the ground as possible, Jur made frequent use of a Panavision Low-Angle Prism. "It's one of those oddball things you usually keep in the back of the truck and pull out once in a while," he laughs. "But John fell in love with it and we used it in almost every scene." By mounting the device — basically a 45-degree prism mirror — in front of the lens and then tilting the camera down 90 degrees, operator Randal Platt could shoot right across the floor.

The prism isn't without its hazards. Flare is an obvious one since the glass in the prism isn't recessed (and thus protected) like a normal lens. Key grip Kevin Black spent long hours floating flags to counter the threat. Rain was another concern while using the prism, and Jur admits it took a lot of busy work to keep the glass clear.

Dahl concedes that he's a stickler about where to place the camera, but that's not such a surprising confession from a former storyboard artist. And while he likes to keep the camera moving, he is not a fan of the Steadicam, feeling that it ties him down too much and also lacks the precision and accuracy of a dolly. On *Unforgettable* the dolly enjoyed nearly constant use because the camera was almost always on the move. Jur had high praise for dolly grip Glen Forrieter, who managed to push the 400-to-500-pound unit even at the extremely slow speeds often required.

Dahl likes to shoot long, continuous takes. Some will end up playing out their full length on screen; others will be edited. Because these shots tend to be complex, and the space available on the set limited, Jur frequently relied upon a remote head. As an example, he points to the scene in which Liotta goes into the room where his wife was murdered and injects himself with her memories. The set was one of only two built

Photos by Bob Akester, courtesy of Metro-Goldwyn-Mayer.

Actors Ray Liotta and Linda Fiorentino play out a dramatic scene in the film's neo-noir world. Here, the hardness of the venetian blind shadows is offset by the soft light around the performers. Although he prefers motivated light, Jur believes it isn't as important as "the feel of the shot." Black ProMist filters were used throughout the shoot to add a diffused, moody component to the photography.

for the production; everything else was an actual location. Constructed in a warehouse, the space was too small for the complicated sequence Dahl had in mind, a four-minute shot that wandered around the room and included a 180-degree turn. Jur ended up sticking the dolly outside the set and arming in the camera with a small crane and a remote head.

Because Dahl likes to see the architecture of a place — and because the tilted shots frequently exposed the ceiling — production designer Rob Pearson designed the office set with slanted ceiling beams, creating geometric angles that were always visible in the background, an effect Jur describes as reminiscent of a church. For a scene set in a flophouse, Pearson added texture to the wall surfaces; throughout the film, he coated walls with enamel paint to create a shimmery, glossy look.

Half of *Unforgettable*'s action takes place at night; as with many crime thrillers, even the interiors draw on a muted palette. But Jur didn't want the whole film to be dark and despairing, the way a traditional noir film might be. "My view of the movie was that, while the Liotta character may live in a dark world, he always believes there's some way for him to find out the truth. So I wanted some part of the frame to have a very bright, overexposed area to suggest that ray of hope."

The result is a very contrasty look: one hallway, shrouded in darkness, is punctuated by shafts of sunlight pouring through an end window, blowing out parts of the frame and turning foreground objects into silhouettes. In another instance, an actor sits in a dusky room, the right side of his face melting into the darkness while the left side is bathed in a hot glow that nearly whites out.

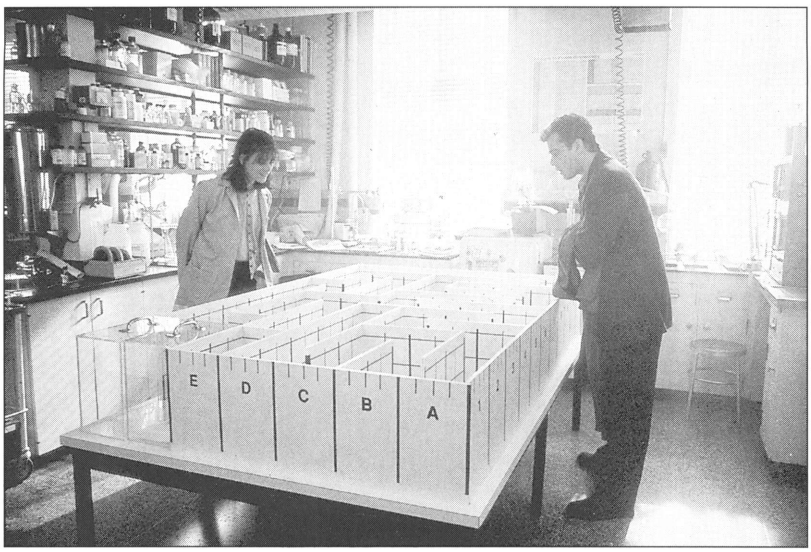
To obtain that degree of brightness and the quick fall-off to shadow, Jur favors using a Chimera, a self-contained soft-box that fits on nearly any light fixture to concentrate the light in one direction. Jur used the soft-box in combination with smaller Fresnel fixtures. By placing the Chimera two or three feet from the actor, Jur gets the extremes he wants: one side of the face is two stops over, the middle of the face is normal and the other side is two stops under. Jur warns the lab that the blown-out areas of the frame are intentional and should not be brought down, and that the underexposed parts should be left dark.

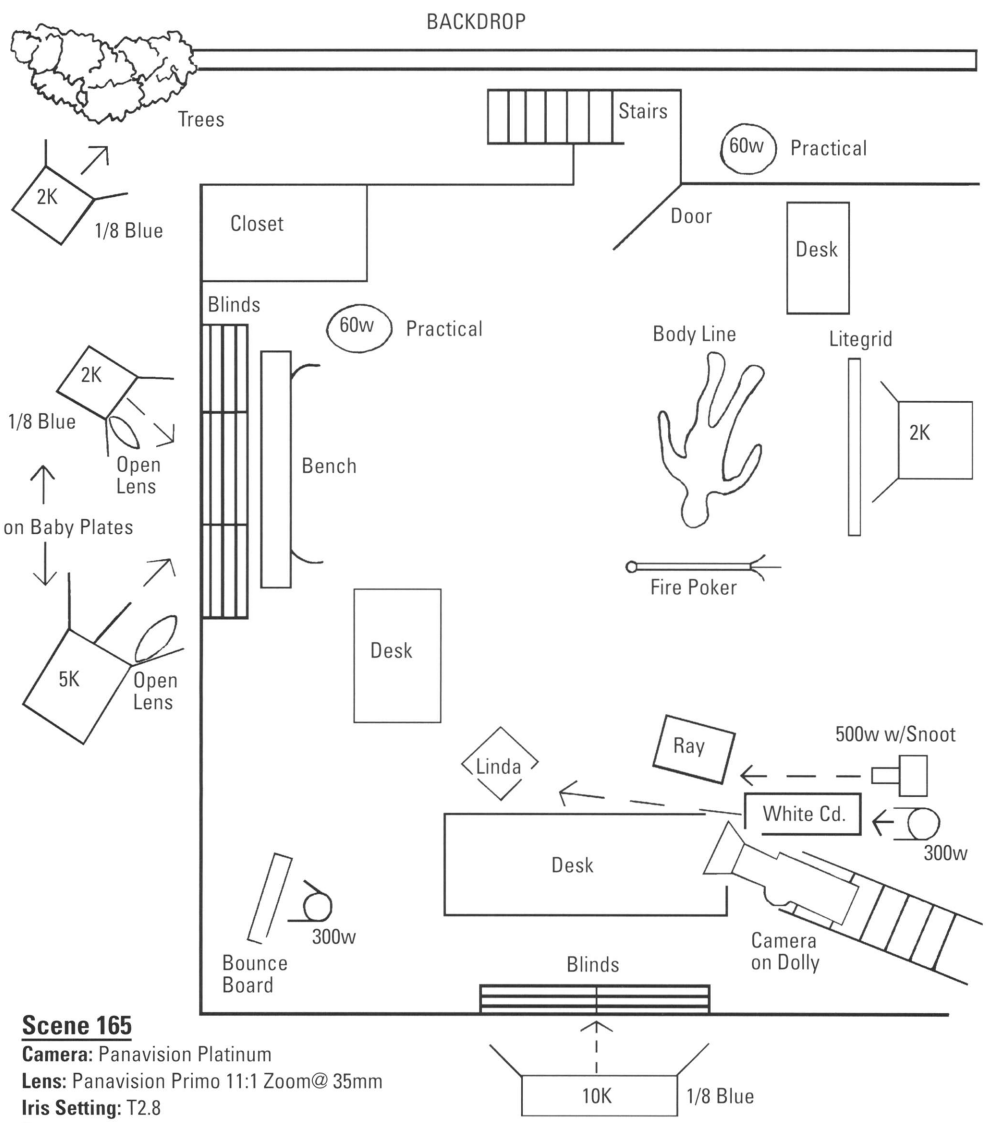
"Although I try to find some place on a set that will allow me to motivate the source, sometimes I just arbitrarily bring it in," says Jur. "I don't think audiences click into the geography of a place like 'Oh, where's that light coming from?' That isn't as important as the feel of the shot. I think you can become a slave to continuity and worry too much about where the practicals are in the room. More and more I think we are accepting a stylistic approach to lighting."

The use of very concentrated, hot background light convinced Jur to go with Primo lenses. "The thing about Primos is they don't flare out, and there's no degradation in the quality of the image because of something that is very bright in the frame, which can happen with some other lenses. The Primos somehow keep their contrast and resolution and you can push very hard on the exposure."

On matters of exposure, Jur, who has been making movies since he was a high school student in Chicago, finds he relies more on

Right: ***Fiorentino and Liotta in her lab. The high contrast in the shot is the result of Jur's tendency to expose for the f-stop between the scene's lighting extremes.***
Below: ***Jur's lighting strategy as designed for a crime scene sequence.***





Scene 165
Camera: Panavision Platinum
Lens: Panavision Primo 11:1 Zoom@ 35mm
Iris Setting: T2.8
Format: 1.85:1
Film Stock: Eastman Kodak 5298
Filter: 1/2 Black Pro-Mist

his eye than his meter. Because he goes for extreme light and dark within a frame, there is often nothing in a scene that constitutes normal exposure. He explains, "Let's say I'm shooting at a 2.8. Nothing in the scene may actually be a 2.8. There will be a lot of bright stuff that will be 5.6 or 8, and a lot of dark stuff that will be a 2 or a 1.4, but I know that with all that range I need to place the exposure in the middle."

The film's flashback sequences — when Liotta is experiencing other people's memories — called for slow-motion photography, which also involved some complex calculations. Using a Panastar high-speed camera, Jur would shoot a scene at 24 frames per second, "and in the course of the shot it would become 96. I would have to light the scene basically to 96 frames — say a 2.8. That means that at 24 frames I'm lighting to a 5.6. So where I would normally light my interiors to a 2.8, I now had to light them to a 5.6. In other words, I had to add two stops of light so that when I increase to 96 frames on the camera it would be at a normal stop — or at a 2.8, which is as wide open as I wanted to shoot."

To maintain a consistent exposure balance, Jur used a Panavision Smart Shutter II, a small motorized unit with a speed-control computer inside, which increased the frame rate while simultaneously opening up the shutter. In effect the Smart Shutter, which can also be operated manually, is making two exposure compensations in opposite directions at the same time.

Despite the film's sci-fi plot twist, Dahl didn't want the fantastic elements of the script to take over. The story was played as a straight thriller, albeit with a slightly dreamy quality. The flashback sequences were more stylized, using variable camera speeds, heavier diffusion, skewed framing, lighting effects, and some perceptible camera movement within each shot. "In every flashback the goal was to find something that could move in some way, shape or form," says Dahl. "It helps drive the image, as well as the cut."

By way of example, Jur points to the opening scene of the

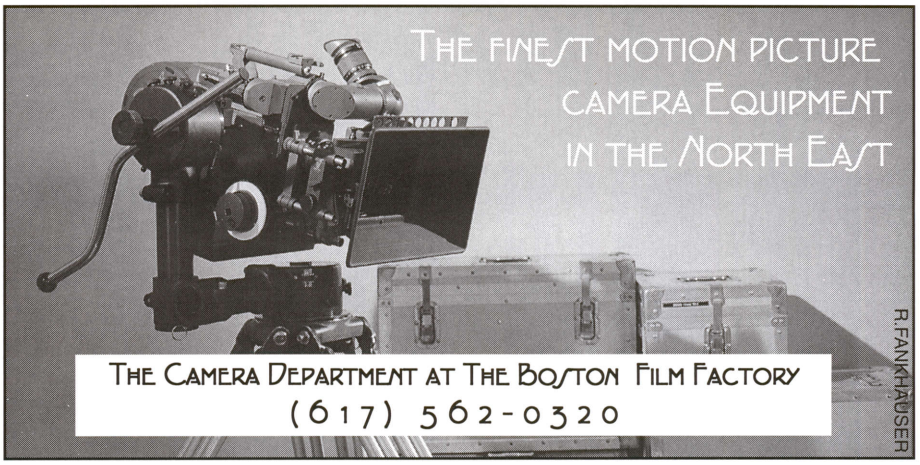
film, which shows the aftermath of a massacre in a drug store, with bodies strewn around the room. Later in the film the Liotta character will inject himself with the memory of one of the victims. "It was John's idea to have one of the fluorescent light fixtures in the pharmacy get shot and swing down," says Jur, "so that during the course of the flashback this light would be changing on the dead woman's face."

> "In every flashback the goal was to find something that could move in some way, shape or form. It helps drive the image, as well as the cut."
>
> — Director John Dahl

"It was really just a license to have something moving," smiles Dahl. "That swinging light sure made a great effect. And we used a longer lens in the scene to make it feel more claustrophobic."

In addition to movement within the scene, the filmmakers wanted to create a sense of activity going on outside the frame. Par lights, simulating car headlights, passed by the pharmacy windows, "to give a sense of life going by," says Jur. And to suggest the chaos of police and fire vehicles which had converged on the crime scene, gaffer Ray Boyle constructed mirrored cubes, shone HMI lights with blue or red gels into them, then had a couple of crew members spin them in a circle. The rhythmic flickering gave an almost otherworldly aura to an already unsettling scene.

Casting an even ghostlier glow was the combination of smoke and ultraviolet light which the medical examiner used to get a sense of the crime scene. The plot conceit is that smoke particles, released into the air, will stick to fingerprints; when the smoked-up area is then subjected to ultraviolet light, the fingerprints become visible to the naked eye.



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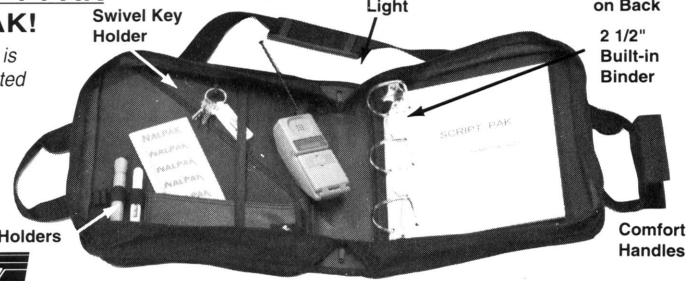

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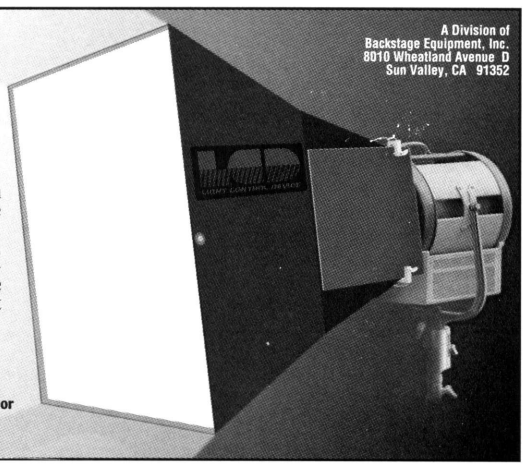

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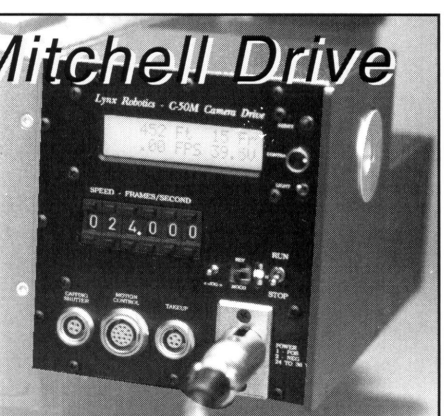

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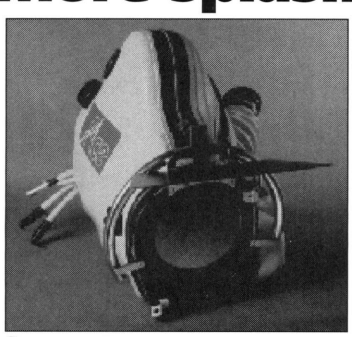

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After the Liotta character smokes up the pharmacy, the cops shine UV lights around the room.

"We put ultraviolet lights everywhere," says Jur. "They're not very bright, so you have to use a lot of them. And, of course, there has to be some kind of UV material on the set to which it can react." The art department painted fluorescent fingerprints all over the room, which glowed eerily in the purplish haze.

Rather than relying on digital work or other postproduction techniques, Dahl stuck to lighting and in-camera effects — such as going from slow-motion to normal speed and back again — for the entire picture. These "acoustic effects," as Jur called them, were used primarily during Liotta's memory sequences.

For one of the flashbacks — that of a police officer in a coma — Dahl wanted a different look. Jur had done some earlier tests with anamorphic lenses, shooting in a spherical format, and Dahl had liked the look. "Normally, anamorphic lenses squeeze a widescreen picture to something square and then it gets unsqueezed," explains Jur. "If you don't unsqueeze it, it has a really strange sort of look to it. So for this character's memory flashback we wanted this anamorphic kind of distortion. We found that the best way to do it was to float the camera very slowly. We used a dutch Cartoni head by Panavision; it allows you to change side-to-side axes and produces a stretched look. We thought it worked well for the memories of a guy in a coma.

"The Cartoni is a dutch-tilt head that fits on top of a regular head. It's actually an old idea. *The Third Man* is the ultimate dutch-tilt head movie, where they would set the camera off-axis. This is just a simpler way of getting those shots that have been around forever."

Another piece of equipment that proved handy was a "moon cube,"a bag which was suspended from a huge construction crane and used to light a city intersection, with four streets fanning out for blocks. The bag consisted of a 10' x 10' x 10' cube of silk diffusion material, inside of which the crew placed Maxi-Brutes, Par

lights and nine-lights. It was a lot of wattage, but the light had to penetrate not only the diffusion material but also a thick gel pack which Jur had designed specifically for the shot. Instead of the hard, bluish light sometimes used to simulate moonlight, Jur wanted the effect of streetlights lighting up a four-square area outside the pharmacy, the site of the film's opening massacre sequence.

"I wanted to avoid setting up lights for city block after city block," says Jur. "And I wanted a single source that would cast an even light over the whole intersection and fall off gradually. The streetlights and buildings in the background exposed fine. All I needed was to boost the exposure in the intersection where all the action would take place. And this gave it to me.

"I wanted to match the sodium vapor lights — the city streetlights — which had a sort of urban gritty color. City lights aren't bluish like moonlight; [you get] orange from streetlights. So I picked out a gel that was a combination of apricot and a very slight magenta, and it re-created that look pretty well. I balanced between this light and the natural light that was shining in the background. And I was shooting fairly wide open, probably at T2 or something like that."

The crane was parked half a block away, its 125' arm stretching out and up to reach the intersection. The moon bag was hung some 50' off the ground, above the tops of the actual streetlights, which Jur had turned off to avoid creating extra shadows.

With *Unforgettable* completed, Dahl and Jur already are planning their next feature together. Although the director describes *Unforgettable* as a murder mystery and not a noir film, the cool trappings of the genre are clearly evident. And why not? It's hard to think of another current director who captures the sense of old-time noir the way Dahl does. "John likes to show a dark world in his pictures," muses Jur. "You'll always see an innocent man going through a dark world, which is how I think John sees himself."

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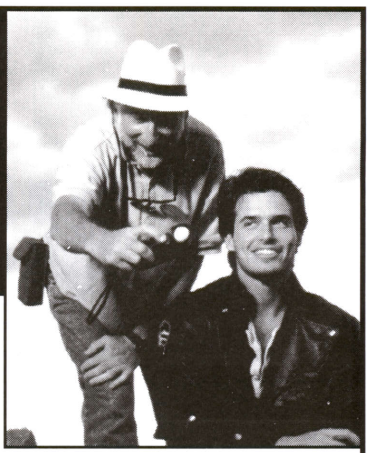

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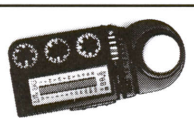

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Archival photos courtesy of Orion Pictures

Music from Another World

Theremin: An Electronic Odyssey traces the arc of a Russian inventor's unique obsession.

by Naomi Pfefferman

PURSUING HIS SUBJECT, FIRST-TIME documentary filmmaker Steven M. Martin lost his girlfriend, his car, two apartments and his American Express gold card.

He also spent time dodging the KGB in Moscow.

The result is his wistful and quirky feature-length chronicle, *Theremin: An Electronic Odyssey*, which documents an obscure electronic musical instrument and its even more obscure Russian inventor.

The story behind the modest 16mm documentary, which won the 1994 Filmmaker's Trophy at Sundance, seems right out of a movie epic: in 1927, Leon Theremin arrives in New York and astonishes audiences with the world's first electronic musical instrument, which consists of a small cabinet with two protruding antennae and is played without being touched; the "theremin" produces unearthly tones as the performer's hands rhythmically move through the twin electromagnetic fields it generates from within.

Following the innovative instrument's debut, Theremin is swept up into Manhattan's glittering high-society life, where he courts his lovely protégé, Clara Reisenberg (later Rockmore) and begins work on a variety of other electronic marvels while she masters his musical creation.

But on one terrible day in 1938, Theremin is kidnapped at gunpoint by Russian agents, secretly spirited back to Moscow, tried for "anti-Soviet propaganda" and whisked off to a Siberian gulag. For years, his American friends assume that he is dead, and the grandfather of electronic music is soon forgotten.

The injustice was not lost on Martin, now 41. "I wanted my movie to right the wrongs that Theremin endured," says the director, who carried on through five lean years of production and four cinematographers (principal director of photography Frank DeMarco, along with Ed Lachman, ASC, Robert Stone and Cris Lombardi). "I just didn't care about anything except getting the film done, because Theremin made that great of an impression on me."

Before Martin knew of the man, he knew of the instrument. He traces his fascination with the theremin to a night in Southern California, three decades ago, when he and his identical twin brother, Doug, were allowed to stay up late to watch the sci-fi classic *The Day the Earth Stood Still* on television.

The boys were soon mesmerized by the weird, wavy "*weee-ohhh-weee*" noises on the soundtrack, which sent chills up their spines. Thereafter, says Martin, "we'd always make these theremin sound effects to each other, and my poor mother would say, 'Stop it, speak *English*.'" The twins later recognized the instrument's signature tones on the soundtracks for the films *Spellbound* and *The Lost Weekend*, and in the aptly-titled Beach Boys song "Good Vibrations."

Above: ***Professor Leon Theremin fiddles with his unusual invention.***

Fast forward to January 1989, after Martin had a.) worked as a junior executive for Francis Ford Coppola's Zoetrope Studios; b.) directed music videos; and c.) appeared with Doug in an identical-twin cameo in *Fast Times at Ridgemont High*.

With these varied experiences under his belt, Martin was hoping to direct his first feature film, for which he naturally wanted a theremin score. It just so happened that a friend's mother knew the uncommon instrument's virtuoso and Theremin's former paramour, Clara Rockmore. Martin finagled an invitation to tea, but soon found that he was "outclassed," and that Rockmore was retired and frankly disinterested in playing the theremin for his soundtrack.

Photo by Steve J. Sherman

Top: ***Writer/producer/director Steven M. Martin meets with theremin virtuoso Clara Rockmore, Leon Theremin's close collaborator and longtime romantic interest.*** **Bottom:** ***Cinematographer Frank DeMarco takes a light reading.***

She *did* demonstrate the bizarre instrument, however, told the story of its ill-fated creator and revealed that he was still alive. Intrigued, Martin suddenly saw the entire documentary flash before his eyes, but Rockmore wasn't interested in *that*, either.

"Then I leaned across the table — I think it was the Russian tea — and I kind of pointed at her," the director recalls. "I said, 'You owe it to me to do this movie, and you owe it to yourself and to Theremin. Because if you don't, there will be no record of all the work you've done in the past 60 years, and it will all be a waste.'"

Rockmore's eyebrows shot up, but as Martin prepared to leave she tentatively touched his arm. "She asked, 'Would you really do a good job?' And I said, 'Yes, and I will go to Russia and I will find Theremin and I will bring him back to New York,'" the filmmaker says. "I was so excited about the story, it was like finding the Rosetta Stone."

Rockmore gave him Theremin's Moscow address, but nothing else about the documentary would be easy. When Martin tried to raise money for the project, the response was often, "Theremin who?" When he tried to persuade Rockmore to perform with the instrument on camera, she put him off for nine months.

By the time she allowed him to film her at New York's Merkin Hall in September 1989, Martin's aesthetic vision for the documentary was complete. He wanted the cinematography to be simple, understated, even cool, allowing the natural drama of the story to emerge without gimmicks. He didn't want a "slick, hip, pop-culture look" or any false sentimentality.

Instead, this son of a graphic designer aimed for a "spare, stripped down, almost Bauhaus" look as he arrived at Merkin Hall with cinematographer Ed Lachman, his Aaton and a large red backdrop.

For the concert shoot, Martin had in mind a scene from Antonioni's *The Passenger* which utilizes only three colors: "The white of Jack Nicholson's trousers matches the bleached plaster walls of the [setting]; the brown of his skin matches the sand and his green shirt the vegetation," the director begins. "So I wanted our red backdrop to match Clara's lipstick and her fingernails; the black of the instrument to match her gown and her white skin to match the chrome of the theremin's antennae. No tricks, just good design."

Simplicity was also the goal in July 1990, when Martin finally earned permission to film the long-lost Leon Theremin in the former Soviet Union by posing as a musicologist. Martin's partner at the time was Academy Award nominee Robert Stone (*Radio Bikini*), a documentary director-cinematographer who had also been fascinated by Theremin's story and was willing to go along for the ride.

Time was of the essence. The inventor was well into his 90s, and Martin knew that if he waited for funding to come through, "It might well be too late. So I took every last dime I had in the bank — even though I realized it was going to get me kicked out of my apartment — bought a case of film, and off we went."

In tow was Stone's "workhorse," a CP-16 newsreel camera from the Seventies; his Angenieux 9.5-57mm zoom lens; a standard Lowel Tota lighting kit; an O'Connor tripod; some Kodak 250 and 500 ASA film stock and a Nagra tape recorder. The camera "had been banged around and was sort of on its last legs," Stone admitted, "but with the urgency of the shoot I was willing to take it out one last time."

When the team got to Moscow, of course, the Nagra and the camera proceeded to break down. "At one point the take-up on the magazine died, so as I was shooting I had to manually wind the film through so the camera wouldn't jam," the cinematographer recalls with a laugh. "Then I had to perform open-heart surgery on the equipment every night."

Meanwhile, in a twist worthy of novelist Ian Fleming, Martin and Stone soon discovered that their "cultural foundation hosts" were actually agents of the KGB, who refused to grant them permits and kept threatening to send them home. "We had to stand in line for food, just like the Russians, except there was nothing in the stores and we were always starving," Stone says. To make matters worse, their translator mysteriously "disappeared," leaving Martin to converse with a senior citizen who hadn't spoken English in 30 years. "The Russian word for what we endured is *kashmare*, a nightmare," says Martin.

The filmmaker's spirits perked up once he met the cordial, aristocratic Theremin. Always the strong director, he told Stone exactly what he wanted for the crucial interview: a natural, window-lit look which was also muted, since Theremin's typical Russian apartment was decrepit. "If we'd over-lit the place, it would have looked really crummy," Martin says.

Just using a couple of lights blew out all the fuses, however, so the cinematographer finally placed a single Tota 750-watt light, covered with a blue gel, by the window to simulate daylight.

When Martin asked him do some handheld work in the inventor's cluttered laboratory, the cinematographer inadvertently captured the shot which would introduce Theremin in the film: he appears swathed in an aurora of light streaming though the window behind him, like a god haloed by an ethereal, otherworldly glow. The director, in his characteristic ironic tone, adds that he almost didn't use the shot, "because you can see me in a mirror, and who do I think I am, Alfred Hitchcock?"

At times, the rest of the eight-day shoot *did* seem like something out of a Hitchcock thriller, especially when the team snuck down into the subway without a permit late one evening. The camera, loaded with high-speed Kodak 500 ASA stock and with its lens wide open, was ready to go, concealed under Stone's jacket.

Martin was looking for some "paranoid, creepy" footage that would suggest how Theremin felt when he secretly met Rockmore in the subway during her trip to Russia in the Seventies; Stone accordingly shot edgy, claustrophobic, handheld point-of-view shots as he walked though the deserted tunnels.

Back in the States, Martin flew out to the West Coast, where cinematographer Cris Lombardi helped him shoot interviews with subjects such as the Beach Boys' eccentric tunesmith, Brian Wilson. In New York, the director enlisted the help of cinematographer Frank DeMarco, who'd assisted Lachman at Merkin Hall.

DeMarco, now 39, had previously worked on the Academy Award-winning documentary *The Johnstown Flood*; he was also the inventor of the Frank-O-Slate, a retro-reflective slate, and the LogoScope, which places logos in out-of-focus highlights of a photographic image.

DeMarco had also studied classical piano through high school, so he arrived at Merkin Hall with some preconceived notions about *Theremin*. "I thought this was going to be some goofy, campy little documentary about a spooky instrument used in sci-fi movies, by some crazy guy I'd seen in *Fast Times at Ridgemont High*," he says.

But he changed his mind once Rockmore began to play a serious classical piece; when Martin told him the tragic story of Theremin, the cinematographer was "emotionally hooked."

DeMarco's first major shoot took place in the summer of 1991, when he arrived at Rockmore's stylish Manhattan apartment with his Arriflex 16 SR camera, his Zeiss 10-100mm T2 zoom lens, approximately 15 rolls of Kodak 7296 500 ASA film and some specific problems in mind.

"Steve wanted Clara to be photographed in the most complementary way possible, and she didn't want to be shot in close-up," DeMarco begins. "Since this was a documentary, I didn't want to use diffusion on the camera, and I needed to make the octogenarian Clara look beautiful without going in there and tearing up the joint with a thousand lights."

He finally selected as his key a 750-watt Tota, aimed through a silk umbrella and raised high to create a Marlene Dietrich, high-cheekbone look. "I wanted to put a nice light in Clara's eyes, because this documentary is all in the eyes," he adds. As a backlight, he "clamped a little 200-watt Inky on the ceiling and covered it with a half-blue CTB gel" for a natural, window-lit effect.

Not long after that shoot, DeMarco hopped into his 1986 Volvo wagon and drove the director down to North Carolina to interview synthesizer inventor Robert Moog.

This time, instead of shlepping the heavy Nagra, the duo toted a lightweight Sony DAT Walkman recorder outfitted with a Schoepps shotgun mike. But disaster nearly struck when DeMarco accidentally knocked the recorder off a table. "It was blinking 'caution, caution' and it wouldn't eject the tape," recalls the director of photography, who's also a *Theremin* associate producer. "Steve was tearing his hair out and freaking. Then *he* knocked it off the table and it started working again."

Martin was soon fretting over an even more trying matter: how to bring Theremin to the U.S. One problem was that the inventor had been forced to work for the KGB and had actually invented the "bug" microphone, so Soviet officials were reluctant to let him leave the country. Another obstacle was that the officials were requiring Martin to take out an enormous health insurance policy on Theremin before they'd allow him to travel.

The dilemma was solved when Stanford University agreed to sponsor a symposium on the inventor; just after the Communist regime dissolved in late 1991, the

Theremin: The Blow-Up Odyssey

by Frank DeMarco

Director Steven M. Martin and I never dreamed we'd be doing a 35mm blow-up for *Theremin*, a regular 16mm film shot in 1.33 for television exposition. It's primarily a vertical film — the instrument is vertical and the interviewees are vertical. Because composition and framing were so important, we worried that they'd get compromised in the blow-up.

The theatrical distributor, Orion Classics, sent us a videotape of *Theremin* with superimposed white lines indicating 1.66 and 1.85 croppings for 35mm. We carefully reviewed the tape and determined that a 1.66 blow-up would need significant vertical repositioning, and that the archival stills used in the film would have to be reshot. Because the result would be only marginally acceptable, Steve, a former projectionist at L.A.'s NuArt Theatre, and I, having hung out in various projection booths during my misspent Baltimore youth, decided against 1.66. We both knew that a 1.66 film is often projected in 1.85 anyway!

A 1.85 blow-up would crop the top and bottom of the frame so severely that people's heads would be chopped, and in wider shots folks would appear to be standing on their ankles. Neither 1.85 nor 1.66 would work for *Theremin*.

A straight blow-up to 1.33 was feasible, but since only a few art houses project 1.33 anymore, wide distribution would be impossible, so that option was dismissed.

Because Orion Classics wanted a 35mm blow-up for North American theatrical exposition, 1.85 would be the best choice. I thought, 'What if we put our little 1.33 movie inside a 1.85 box?' Then all of our film would be seen and there'd be just narrow black vertical bars on either side of the screen — a sort of reverse letterboxing.

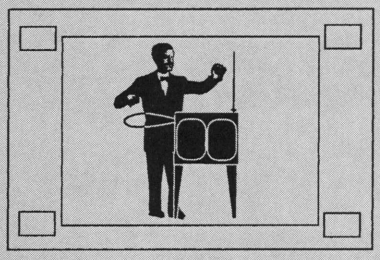
Martin understood my box-within-a-box idea immediately and cautiously agreed that it made sense for *Theremin*. Scott Mandell, Orion Classic's vice president of postproduction, gave us the go-ahead to try it.

Lou Cafiero and Carl Guadagno of Guffanti Labs also agreed that it was a viable idea. So did Jeff Kaplan and Jerry Siegal at Reel Effects, our optical house, which shot a few test blow-ups. There were some technical problems, but by the third trial Steve and I had it just the way we wanted it. Finally, *Theremin* was done.

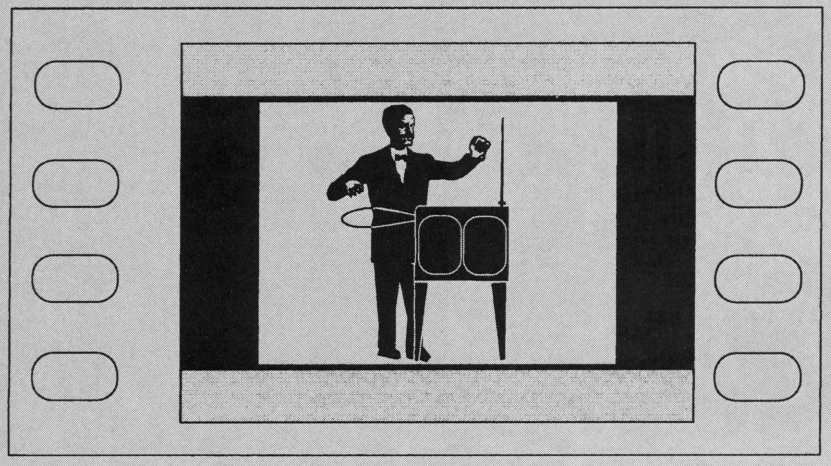
The resulting 35mm blow-up was amazing! Guffanti's crisp, clear prints look better than the 16mm version because they are finer-grained and have a nice "snap" from the slight increase in contrast after the blow-up process. There was more picture information, in all directions, than we had ever seen in our 16mm projection prints because we were using the whole 16mm negative area. Because there is more image area to work with, scenes we had difficulty color-correcting in 16mm were tweaked to perfection in the blow-up. Luckily, the multiple cameras used on *Theremin* had very clean gates — there are only one or two shots in the whole film with noticeable hairs.

An additional bonus: our 1.33-box-within-a-1.85-box has almost 10% more resolution than a Super 16 neg cropped to 1.85 and blown up to 35mm!

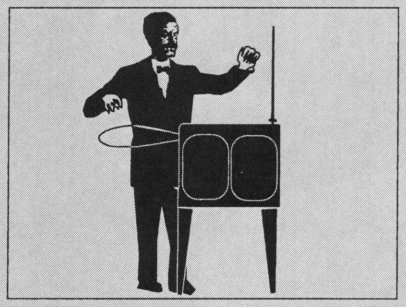
Illustrations show why the filmmakers decided to opt to frame the film as "a 1.33 box within a 1.85 box." At right are some rather disastrous compromises rejected by director Martin and cinematographer DeMarco; at left is the ingenious solution.



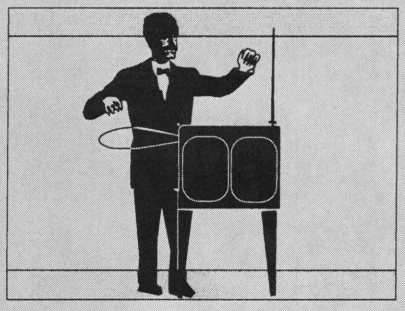
The 16mm original with 1.33 framing



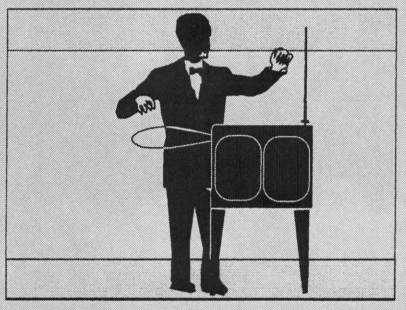
The 35mm blow-up with the 1.33 image inside of a 1.85 box



original 1.33 framing



original 1.33 framing cropped to 1.66



original 1.33 framing cropped to 1.85

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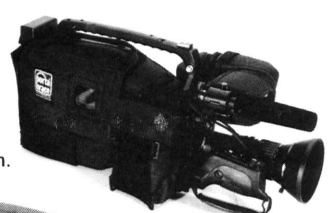

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Russian was on his way to America to reunite with Clara Rockmore.

For the crucial climactic scene, Martin wanted to capture Theremin walking down the long, dark corridor to Clara's apartment, as if he were traveling back down a tunnel through time. DeMarco arrived early to remove the globes from the corridor lamps so there would be a bit more light in the hall; he also planned to used his Angenieux 5.9mm T2 wide-angle lens to "create a greater sense of movement" in the corridor. "I didn't want to use any light stands in Clara's apartment," he adds, "so I unscrewed all of her 40- and 60-watt lamp bulbs and put in 75- and 150-watt photo-floods, PH211's and PH212's." A 750-watt Tota was bounced off the ceiling for natural, non-directional light.

"My intention was to be as unobtrusive and sensitive as possible, because in many ways Clara was nervous and upset on the day of the reunion. She was elderly, after all, and we were taking her back to the lost love of her youth."

DeMarco, who likens documentary filmmaking to improvisational jazz, knew he'd have to be spontaneous and intuitive during the shoot, but nothing prepared him for what actually happened. Rockmore performed "Summertime" for Theremin, showed him around her apartment, then looked at Martin and announced, "Cut." She said she wanted time alone with her friend, and promptly kicked the film crew out of her apartment.

DeMarco's intuition served him well on other occasions when, armed with a handheld camera and natural light, he captured some of the most poignant moments of the movie. On one shoot, he was driving in a limousine with Theremin, who was illuminated by splintery fall light and shadow as the car traveled between New York's skyscrapers. At one point, the inventor looks right into the camera, then falls asleep, capturing all the sadness of his dashed dreams.

On another excursion, DeMarco followed Theremin on an evening stroll around Times Square, as the stooped, wizened Russian goggled at the garish neon signs and the gaudy Broadway storefronts. DeMarco used his Angenieux 5.9mm wide-angle lens to take in the vast "set" of the Square; between shots, he stashed the camera in a shoulder bag to avoid attracting attention.

All the while, Martin and DeMarco worked together like a well-oiled machine. Martin recalls, "When we disagreed, which was rare, I'd say, 'Fine, we'll shoot it both ways. We'll shoot mine first and then yours; just don't make mine look crummy just to get your way.'"

Their rapport continued into *Theremin's* only studio-style shoot, which was accomplished off-hours at National Video Industries one evening during the fall of 1993. DeMarco had come up with a unique idea for Martin: why not shoot an old theremin instrument as a symbol of the inventor himself, allowing the scratches and dents to mirror Theremin's aged body?

To capture the necessary detail, DeMarco hung "a Mole 4K baby soft with an eggcrate directly over the theremin. I lit the sides of the instrument with 2K Mighty Moles through four-by-four silks," he says. He used Kodak 7248 stock, "because I wanted a finer-grain film which would allow viewers to see all the nicks and gouges in the wood's finish."

When the director of photography noticed a large motorized turntable in one corner, he placed the theremin on the rotating "Lazy Susan." Per Martin's instructions, he dutched the camera and zoomed in and out so that the instrument appeared to be spinning diagonally through black space. Martin was so pleased with this impromptu "theremin in space" shot that he used it to announce each "act" of his film.

Sadly, Leon Theremin died the day after the documentary had its first public showing on Britain's Channel 4, before he could even read the glowing reviews. "The irony was not lost on me," says Martin, whose film eventually won a British Academy Award nomination and was released theatrically in the United States by Orion Classics. "I'd happily give back the attention I'm now receiving to have Theremin around to enjoy it."

Unifying A Visual Truth

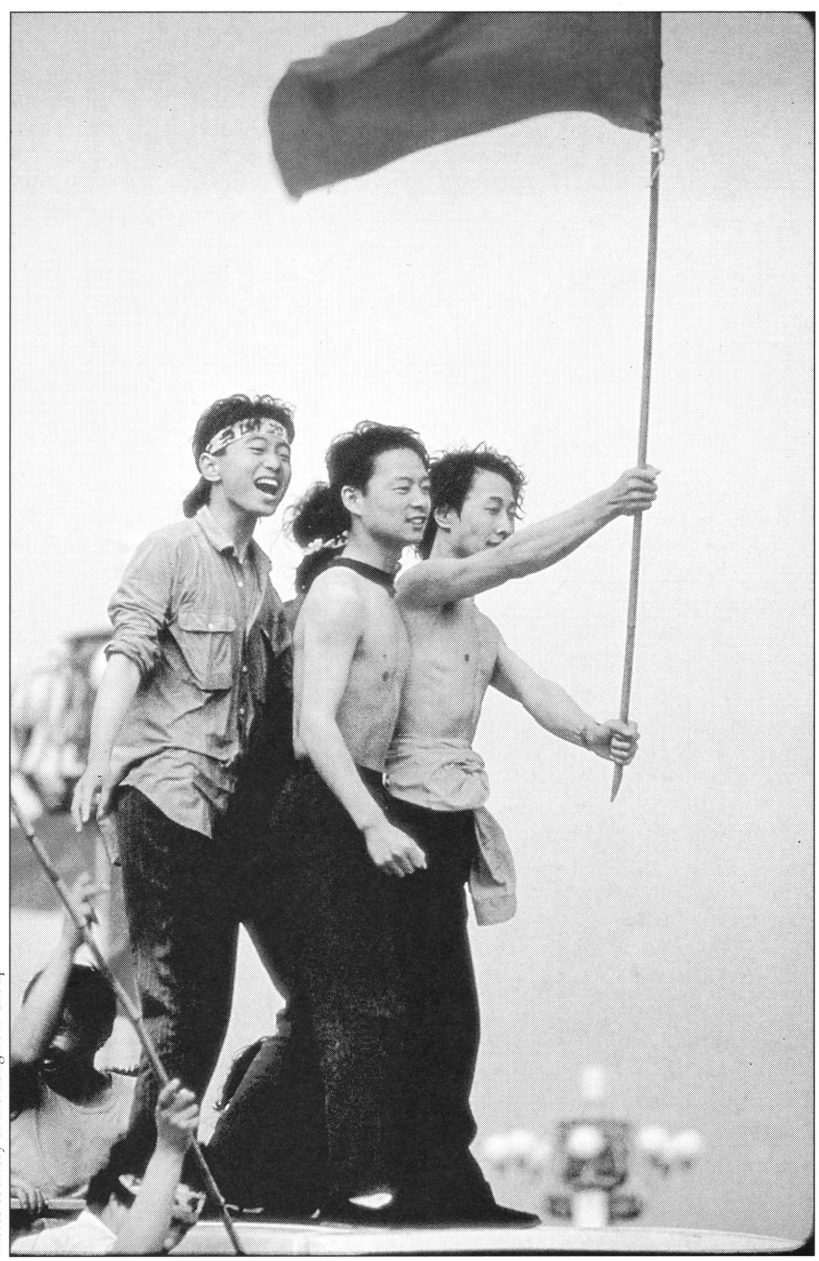
Documentarians Carma Hinton and Richard Gordon enlist postproduction specialist David Leitner to help revise the history of the Tiananmen Square protests via a multitude of image sources.

by Brooke Comer

EVEN BEFORE *THE GATE OF HEAVENLY PEACE* closed the New York Film Festival, the documentary was receiving national attention, set off when the Chinese government asked the Film Society of Lincoln Center, the Festival's organizers, to withdraw the picture. The government based their request on the documentary's subject matter, the 1989 demonstration in Beijing's Tiananmen Square, which they claimed was an insult to China. Festival officials refused to withdraw the film and the Chinese government retaliated by refusing to allow Zhang Yimou, whose film *Shanghai Triad* opened the event, to attend the premiere. So *Heavenly Peace* opened to an audience eager to see the film that would be considered contraband in China.

Carma Hinton and Richard Gordon, the husband-and-wife team who co-directed *Heavenly Peace*, brought diverse talents to the task. Both are American, but Hinton spent the first 21 years of her life in China. Mandarin was her first language, and she shares a cultural identity with her native country. Gordon, a former still photographer turned documentary cameraman, has shot several previous films with Hinton, including *Abode of Illusion*, about Chang Daichien, one of China's most famous artists (who also happened to be a forger); *One Village in China*, a three-part series examining life in Long Bow, a rural community southwest of Beijing; *First Moon*, about New Year celebrations in the Chinese countryside; and *Stilt Dancers*, about the celebrative art of stilt dancing.

The *Heavenly Peace* project evolved while Hinton and Gordon watched the Tiananmen Square demonstration in 1989 and were frustrated by the simplistic way the events were portrayed on TV. "There seemed to be only two sides," says Gordon. "It appeared to be old versus young, good versus evil, and many Americans seemed to feel that 'people power' was about to transform China into a democratic state. The reality was far more disturbing and complex." But he admits that "we didn't know what we were getting into when we started."



Photos courtesy of the Long Bow Group

Chinese youth brazenly confronted entrenched authority during the Tiananmen Square protests of 1989. Depicted simplistically by the media, the ill-fated conflict was far more complex than even the* Heavenly Peace *documentarians ever suspected.

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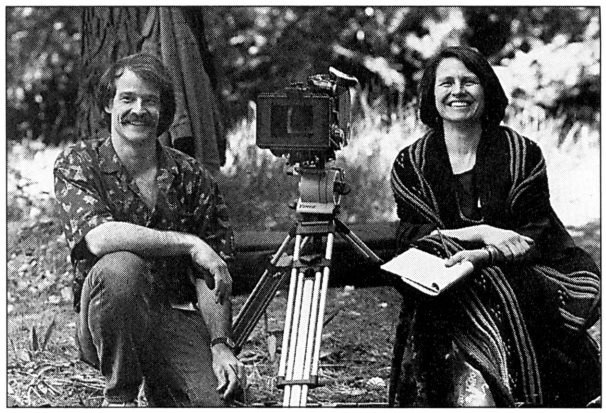


The filmmaking team of Richard Gordon and Carma Hinton.

Heavenly Peace combines interviews shot by Gordon with archival footage. While Hinton used her insider savvy to conduct interviews, Gordon manned the Aaton, which he prefers because of its flexibility and ease of operation. "Aaton's magazines have a very smart design. You can load them quickly, and if you don't have a full crew it makes your work that much faster. It's a very clean, quiet camera."

That was a plus for the filmmakers, who mastered the art of covert filmmaking to protect their project from government authorities. "We had undercover police trailing us once," says Gordon. "We learned to work quickly, quietly, and attract little attention." He carried camera and sound equipment in travel bags rather than film cases, and tried not to look like a filmmaker.

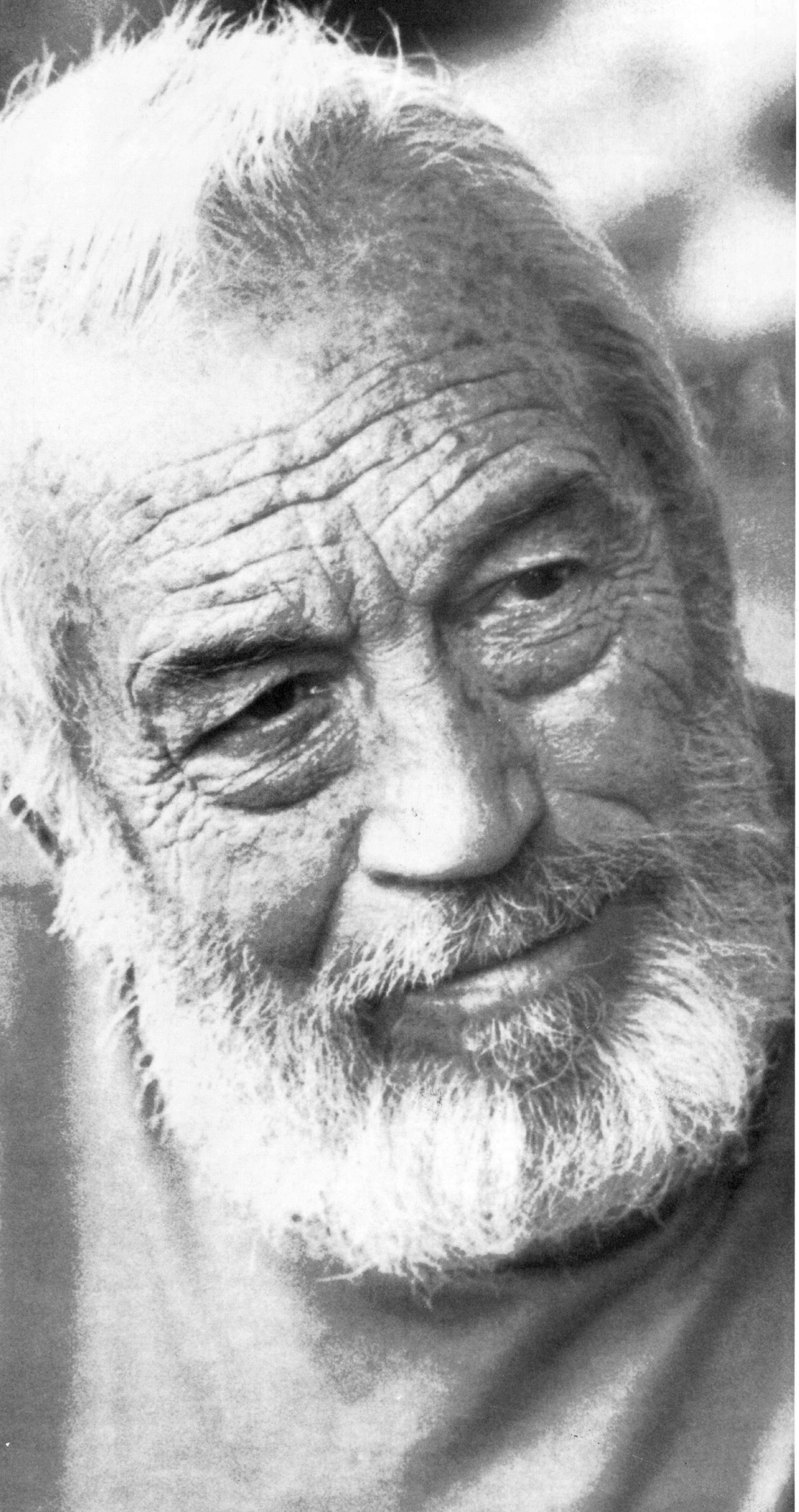
"In order to make documentaries in China," says Gordon, "you have to do more than speak the language. You have to be able to enter into the culture." He credits Hinton with being able to evoke intimate responses from Chinese people, who responded to familiar references and insider slang. "Carma feels foreign in both China, where she doesn't look Chinese, and in America, where she has no cultural identity. This gives her a heightened awareness of the nuances that distinguish each culture."

Gordon knew that his goal — to make a documentary film that presented an array of different perspectives on the Tiananmen Square events — would not be easy. "Look at the successful documentary films in the past 30 years," he says, "and count how many of them have a cast of 17 characters." He wanted his audience to hear different messages and make up their own minds. "We're not pushing one way or another. We're trying to do justice to the actual events that occurred." That task was made difficult partly because of the extensive archival footage the documentary required.

"It was a gift and a curse that so much archival footage existed," laments Gordon. "We had hundreds of hours of footage to screen, and much of it was difficult to obtain." Ironically, it was harder to get footage from CNN than it was from Chinese networks, even though the Chinese government did not officially cooperate with the filmmakers. But China's copyright laws made most of the broadcast material fair game. "All we had to do," says Gordon, "was obtain high-quality copies." And the filmmakers did receive unofficial help from people in and out of the Chinese government, often at great personal risk to themselves.

"One of the film's surprising messages is that within the government, there are many faces and opinions," Gordon explains. "There are many high-ranking people who feel shame over the Chinese government's role in the Tiananmen Square event. There was a lot of conflict and disagreement within the Communist party about how to respond to the demonstration. After the massacre, many officials defected and protested the repression."

Gordon himself was disturbed by the coverage of the demonstration. "We looked at hundreds of hours of network coverage, and it was very hard to find any that contained Chinese people talking." To the filmmaker, that



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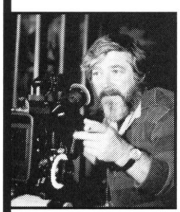

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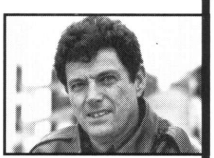

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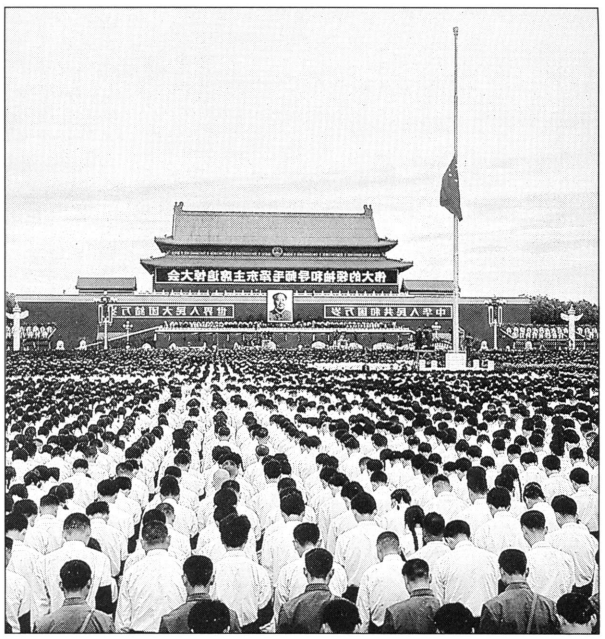


The immense size of Tiananmen Square is apparent in this shot from Mao Tse-Tung's funeral in 1976.

meant the coverage included too few Chinese opinions.

To include those voices, Gordon and Hinton often turned to home videos. "Network television wouldn't tape a whole speech. They'd get a bit, then do a cutaway," Gordon explains. "But we found plenty of people who had home video sources, who'd shot long takes and had complete speeches, including disagreements among insiders and other conversations the networks wouldn't use."

While this new source of material helped the filmmakers tremendously, it also made the postproduction process more complex. "Name a format," says Gordon. "We had it." The archival footage collection existed on a wide range of formats, including PAL, NTSC, BETA, VHS, 35mm nitrate from the 1920s, and Secam from Russia.

Gordon's own original footage originated on 16mm, except for one night shoot of Tiananmen Square, which he filmed on 35mm. It was also the lone occasion on which he traded in his Aaton for an Arriflex.

The task of posting *Heavenly Peace* fell to David Leitner, a documentary filmmaker and director of photography who has known Gordon since the early 1980s, when Leitner ran Du Art's lens and camera testing service. Leitner was poised to shoot another film when Gordon's producer, Lisa Yasui, first called him to work on *Heavenly Peace*, and although the project interested him, he was forced to decline. But the other project didn't come through and Leitner was ultimately able to accept the job.

Heavenly Peace had already been accepted by the New York Film Festival when Leitner began his work at 4MC (Four Media Companies, formerly known independently as Meridian Sound, Compact Video, Image Transform and Image Transform Lab). Envisioning the final 35mm theatrical print version of the film, Gordon had planned to take a 1.33 video image and transfer that so the full image would reside within a 1.85 frame in terms of height, with the left and right sides filled in with black to preserve the 1.33 aspect ratio. But Leitner, whose extensive experience included an Academy Award nomination for his work on *For All Mankind*, which depicts a vicarious journey to the moon using footage of Apollo astronauts, argued against this plan.

"One of the glories of 35mm is scale, the size of the image on a full screen," explains Leitner. "Another glory is the wide screen, which for the moment distinguishes the 35mm format from every other conventional video or 16mm format. When you convert a 1.33 image to 1.85, you lose 25% of the height of the image. Sometimes there's no way to fit a 1.33 into a 1.85 composition comfortably, though most of the time there is; the top part may be selected for

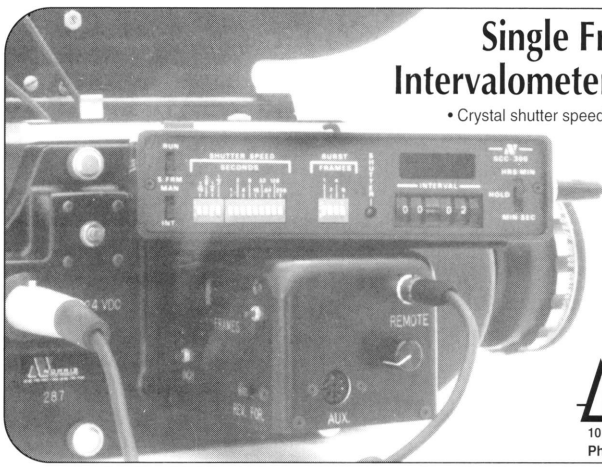
reproduction, or the middle may work best." But in the case of *Heavenly Peace*, he knew that "the wrong thing to do was to reproduce it as 1.33 within 1.85."

Leitner had seen the material Gordon showed him on tape, "and Tiananmen Square, the largest open square in the world, is huge. It's mind-boggling. It's so large that when you're shooting, you're shooting the horizon. Many shots in this film have a lateral quality to them, dominated by lateral perspective lines. All perspective lines work on that basis. It was clear to me that most of the shots would sustain a 1.85 cutoff, but only if we could carefully reposition each shot." Further, Leitner was working primarily with video footage, with the exception of talking head-interviews shot in 16mm, which would remain in video to be transferred back to film. "There wasn't time to blow up the 16mm to 35," he explains, "though that's what I'd have liked to do."

When Leitner looked at the material, he realized that many shots would have to be dynamically re-framed. "There were shots from TV news of a sudden pan, or two students running by with an injured student in a stretcher, and at the beginning of the shot panning left you'd want the top part of the frame where the part of the image that best fit into the 1.85 frame would be. By the end of the shot, you'd want the bottom of the frame."

At New York's Tape House Digital, Leitner was able to "tilt" the image vertically, repositioning each shot using a digital ADO-like device known as a Kaleidoscope — starting at the top of the frame and scanning to the bottom by the end of the shot. "My goal," says Leitner, who used this technique on 30% of the shots, "was to do this so smoothly that no one would know what happened. In one or two places, you can sense a mechanical move, but I've hidden them — tucked them away in other camera moves." Even Gordon and editor David Carnochan couldn't tell where many of them were.

Leitner was grateful that Gordon had been transferring ev-



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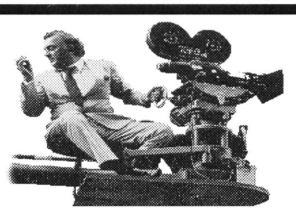

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ery format he received to D1. "That was the wisest thing he could have done, because D1 preserves the signal of the original source more effectively than any other format."

Once the D1 was onlined at Boston's Multivision, that result went to New York, where it was color-corrected at Du Art Video. Leitner took the color-corrected master to Tape House Digital, where he used the Kaleidoscope and the Cadenza digital switcher to reposition every single shot within a letterboxed 1.85 format. The letterboxed master was then returned to Boston for titles at Multivision, then forwarded to Los Angeles for tests at Image Transform.

The first real obstacle appeared when Leitner got complaints about digital errors from engineers in Boston and Los Angeles. "That term is too vague, and I couldn't figure out what they were talking about," says Leitner. He and Gordon were doing tape-to-tape work and color correction in New York when the first complaints arose. They slipped into Du Art's screening room for a test and soon noticed that some talking head interviews were soft and out of focus. "I'd supervised the film-to-tape transfer and I knew those shots were sharp. Richard and I were dumbfounded."

Leitner went back to Tape House Digital to investigate the Boston engineers' complaints. He found a strange moiré-like interline flicker in a series of shots of statues with horizontal lines taken in Tiananmen Square. "Whenever you work in video and deal with fine horizontal lines, you run the risk of artifacts like false chrominance and beating," he explains. "Remember when Johnny Carson would wear seersucker suits? But I'd never encountered this effect before."

Now all Leitner needed to do was find a solution to the problem. "I suspected what was causing the soft focus. In vertically repositioning the video image for 1.85, I'd been adjusting the 525-line raster up and down, depending on how I wanted to recompose each image. However, the Kaleidoscope can shift the raster in such a way that the original scanlines fall somewhere in between the lines on the studio monitor. The result is that under certain conditions the image appears to de-focus, and images with fine horizontal detail appear to flicker."

Leitner spent ten anxious hours in Tape House Digital's Kaleidoscope room reviewing each of the first three 20-minute reels, repositioning each shot on each reel one video scanline higher than he had on the first go-around. Then he went back and A/B-compared each shot between the two masters, which were now one scanline apart. In almost 50% of the cases, the one scanline of difference cleared up the image. Then he hand-picked the best version of every shot from the A pass or the B pass, and, checkerboard fashion, re-onlined the master. "That part of the transform was the secret to our success," says Leitner. "It was painstaking, time consuming, and pricey."

Now Leitner was ready to take his finished material to Los Angeles, where he and 4MC colorist Robert Jung used electron-beam recorders to scan the video onto film. Electron beams use a cathode ray to scan the video raster directly onto film. But a cathode ray can only scan back and forth in a vacuum, so the film is loaded into a magazine, the door is shut, and all air is pumped out of the space between the raw stock and the cathode. "Cathode rays don't have any color, so you can't scan onto color film," Leitner explains. "So 4MC's EBRs scan onto orthochromatic black-and-white 16mm in an RGB sequence. The stock they use is Eastman 7360 Direct MP film, the same kind used for microfilm and microfiche. It's an autopositive stock; you develop it in a negative bath, but get a positive image, like reversal.

"I have always loved this stock. I used to shoot resolution tests on it when I ran Du Art Film Lab's optical department. It is by far the highest-resolution stock that Eastman makes."

Leitner compared 4MC's Jung to the Wizard of Oz. "Robert sat in the tape-correction console, looked at all the video material coming in, did scene-to-scene correction on it, then stored that information on disk," he marvels. "He's also the one who loaded the EBR's film magazine, ran it and sent it to 4MC's lab. He was amazing. He didn't even have a frame-store device to grab a color-corrected frame of an image that would occur later on."

Despite his disparate sources, Leitner attempted to impose a uniform look. "Given the limited tonal range of the video news footage comprising most of the material, I knew I couldn't match the look of color negative. So I decided to try to match the look of early Seventies-era reversal newsreel footage, shot on stocks like Eastman 7252 ECO or VNF [Video News Film]. To achieve that, I brought the video signal down in order to fortify the blacks. But because of the contrasty daylight lighting and the contrasty material from single-chip camcorders, what I got often looked like reversal printed onto Ektachrome print film!"

Leitner also found it easier to transfer and transform original video than film that had been transferred to video and then transferred back to film, such as the talking-head interviews shot with 16mm color negative. "The tonal range is fuller and longer than that of video-originated footage, and consequently the color-correctionist has an expanded range within which to make changes, which can wreak havoc." Small changes upstream at the color-correction stage, Leitner found, can result in big unwanted changes downstream at the EBR stage.

In the end, Leitner was left with a conundrum. "We spend years as cinematographers learning to control our photography, and people in postproduction spend years learning to utilize their equipment and experience to create a result. But when you reach the final step, the transformation from tape to film, you always feel like a pioneer."

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A Testament to Tragedy

Survivors of the Holocaust, a new documentary from Steven Spielberg's Shoah Foundation, offers eyewitness accounts of Nazi atrocities during World War II.

by David Wiener

FOR MOST VICTIMS OF THE CONCENtration camps, captivity ended in death. For the few survivors, it usually ended in silence.

The Survivors of the Shoah Visual History Foundation was established by Steven Spielberg to break that silence and to record detailed, first-hand accounts of the Nazi genocide.

Spielberg first conceived of the Foundation while making *Schindler's List*. To date, several thousand survivor interviews have been recorded and will ultimately be used in a variety of educational projects. *Survivors of the Holocaust* is the first of these. An hour-long documentary directed and edited by filmmaker Allan Holzman, the film is slated to have its first broadcast over TBS on January 8, 1996. Spielberg was deeply involved in the project from the beginning; his ideas and vision left their imprint at every step.

"The startling reality is that most of these people are telling their stories for the very first time," Holzman says. "Certainly it's the first time they're sitting down and telling it from beginning to end. It's the exception for them to speak freely about their experiences. The important thing is for the survivor to go through the experience of telling it as true to his or her heart as can be. And it's emotional; the whole purpose is not to hide from [the truth.]"

The documentary has no narrator; it was decided that the survivors' eyewitness accounts would be far more powerful. "Whenever you see narrated Holocaust movies," Holzman says, "you tend to shut off at a certain point. You can't take all the information and all the horror. Here, you get to hear it from people who have not only lived it but who lived it as children and are still struggling with the loss of their childhood. I don't know how a narrator could find that depth; if you see someone struggling, not even able to talk about losing their mother and father, it's a devastating feeling, but you're able to accept it."

"The look of the raw interviews, as well as the look of the entire documentary, was determined by Spielberg at the outset,"

Photo courtesy of TBS.

An elderly couple photographed in Salonika, Greece.

says James Moll, who produced the project with his partner, June Beallor. "He wanted 20 percent to focus on pre-war life, 20 percent to deal with post-war life, and the rest to be about the war." Beallor and Moll oversee the global effort to collect the testimonies and translate them into educational materials. "Steven also wanted family members to come on at the end of the interviews and discuss how the Holocaust impacted them," Moll says. "Often, that's the most moving part. And [those viewpoints] are reflected in this documentary. The documentary has been structured much like the testimonies themselves."

Survivors of the Holocaust grew out of an eight-minute reel Holzman put together on spec. "Once we saw that sample reel," Moll says, "we knew Allan was the perfect candidate to do our first documentary. Although the testimonies were already shot, he demonstrated so much talent we felt it was appropriate for him to have director credit."

Holzman came to Beallor and Moll's attention through Rick Carter, who worked with Spielberg on a number of films as a production designer. "Allan Holzman and Rick are good friends," Beallor says, "and Rick told us we had to meet Allan because we wanted to put together a promo reel for the Foundation."

"At the beginning, there

Photo courtesy of TBS and MCC.

Women and children being led off by Nazi stormtroopers in the Warsaw ghetto.

were 300 interviews on tape, and the producers felt they were six months away from even thinking about doing a full production," Holzman says. "So I offered to do the fund-raising reel for them and was able to bring in contributed equipment from Lightworks, along with an assistant who donated his time. In about six weeks, I had a finished reel."

The reaction was overwhelmingly positive from Beallor, Moll, and Spielberg. The reel was then shown to Pat Mitchell, president of Turner Original Productions, who had worked with Holzman on *The Native Americans*, a six-hour TBS documentary aired in 1994.

Beallor says that the Holocaust documentary came about in large part due to Mitchell's support. "She really goes to bat for projects like this, projects that are hard to get before the American public."

The film took about eight months to complete, from January 1995 through August 1995. For the first three or four months, Holzman studied testimonies with the indispensable aid of Michelle Kleinert, regional coordinator of the Shoah project.

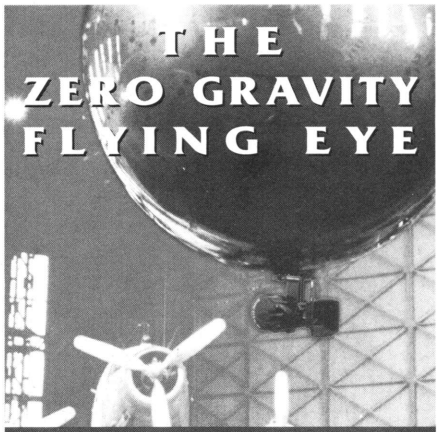
During the six months it took to conclude arrangements with Turner, Holzman worked continuously. "By the time the deal was finalized," he says, "I had my first cut. Once Turner came in, everyone was paid — including me — but it was all speculative for the first few months."

Holzman says he talked himself into the job, no mean feat for someone who struggled for years with a speech impediment. He actually became a filmmaker because of stuttering. "I was a math major. Stutterers don't stutter when they act and I wanted to communicate, so I tried acting. I was at Bennington College on a scholarship, and my theater teacher made movies during the summers; I worked for him as an editor." He was accepted at the American Film Institute and got his start editing *Forbidden World* for Roger Corman. To date, he's cut 15 movies and directed five, the most recent being *Intimate Stranger* for Showtime.

All original footage — the interviews and the copywork — in *Survivors of the Holocaust* was shot on Beta. "There are scores of people all over the world taping survivors," Holzman says. "It's always done on a tripod, not handheld — one shot, all medium-close. The lighting, like everything else, is done according to Steven's concept; it's soft and there's some backlight. Basically, the idea is not to notice the camera at all. The only time you are aware of the camera is when the 30-minute tape runs out. The angle never varies; if the interview is five hours long, it's the same shot. There might be a pan to show a survivor's tattoo, but that's it.

"There is one cameraman who has more work than any other in this production, Yuval Schusterman. He always likes to put flowers behind the survivors, to make sure that some sort of life is being communicated. So you might notice a lot of flowers in the background. The whole feeling is that you're in a living room with all these wonderful, giving older people who are telling you a common story."

The original Beta footage is immediately transferred to digital Beta, which becomes the master. "We never use the original Betas," Holzman says. "They



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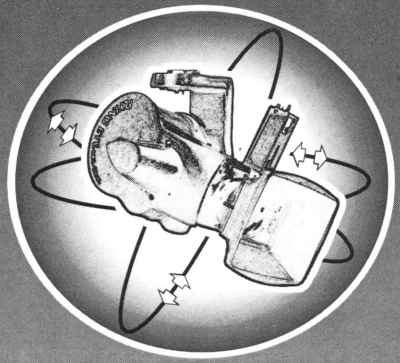

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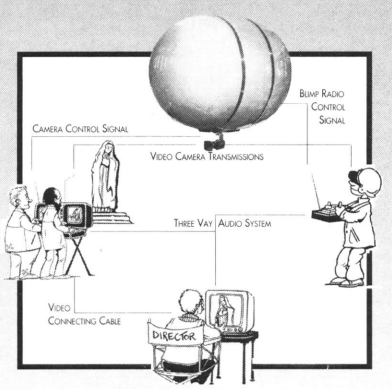

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are archived."

Crews consist of no more than three people, the only paid members being the operator and interviewer. The camera operator is paid a nominal equipment-rental fee and the interviewer receives a $50 honorarium.

"The interviews in the documentary are all in English," Holzman says, "but the survivors are from many different countries. The interview is set where the person is most comfortable, usually in their home. If they would prefer to be in a local synagogue, it's done there. But mostly, they sit in a living-room chair in their home. If there is someone who wants to be interviewed and that person isn't likely to live very long, we race to get that interview as quickly as possible."

> "The startling reality is that most of these people are telling their stories for the very first time." — Allan Holzman

Holzman refined his documentary editing skills on *The Native Americans*. "By taking dialogue, using long dissolves, and superimposing still and archival images, the whole spirit of the story becomes accessible," he says. "It's a bit different than presenting something that's strictly historical.

"With archival footage, the technique was to slow it down," he elaborates. "When you see archival footage at normal speed, you tend to distance yourself from it and recognize it as 'old film.' But when you slow it down and superimpose the testimonies on it by long dissolves — or even long dissolves of one piece of archival material into another — you see it in a new way, a way which expresses a truer emotion of the subject."

In photographing stills and original artwork by survivors, computer-controlled camera setups were avoided. "Computerized copy cameras tend to de-personalize the photographs, so everything was shot by hand," Holzman says. "In fact, this wasn't done on a copy table at all. A picture was put up on a wall or on a music stand, the camera was set on a tripod, and it was shot — hand-zoom, hand-pan, and so on. We used regular close-up lenses, and two lights at 45 degrees on either side.

"As a result, there's a more natural — if sometimes slightly awkward — look, but it's a more human way to relate the footage. If the footage is slowed to 50 percent speed, you not only smooth out the movements but you add a certain tension. The slowing is done on-line, during postproduction. It becomes more organic; I don't know any other way to describe it. If you sit down and watch something done by computer and then watch something shot by hand, you'll see that the hand movements are slightly less predictable and a little more personal. They're certainly more emotional. Everything was shot in Beta and then transferred to digital Beta because the amount of control you have during the on-line editing is much greater with digital Beta."

Without a running commentary throughout the film, the music became vital. "In a very real way, the narration *is* the music," Holzman says. "The music interprets the feelings of the people. It reflects not only the culture but the pride of the people, and communicates with its rhythm the strength of the people, the fact that they've endured so much. If the spirit of the music can reflect that, then you get more than a thousand words can say. The connective bridge from one story to the next, from one person to the next, is often provided by the music. So the transitions, rather than coming from a narrator, are done by the music picking you up and carrying you. It also gives you time to reflect on what's just been said."

In presenting these heartbreaking stories, great care had to be taken not to provoke an audience response which has come to be known as "Why Don't They Shut It Off?" Syndrome. If someone on screen is clearly suffering, audiences often ask why the cam-

era simply wasn't shut off to allow the subject some dignity and privacy. A glaring example would be news coverage of a tragic accident where the director doesn't cut away from a tight shot of the victim's devastated family.

To avoid this, standard documentary practice would dictate a cut to the narrator. But in a production without a narrator, the method had to be different. "Whenever we were approaching anything like that point," Holzman says, "rather than cutting away from the survivor testimony and going to a narrator, we brought in music and put up archival shots of that family, to see the people who were lost. The music was aggressive; it wasn't shy about expressing itself, it didn't feel sorry for itself, and yet it reflected the depths of the culture."

As a guide during editing, Holzman used popular songs from the Yiddish theater and Jewish culture. "When I went to Meir Finkelstein, who composed a full-orchestra, original score for us, I could relate to him the kind of Jewish music I felt was working with the material. Actually, Meir Finkelstein appears on the soundtrack, singing 'Tell Me Where Shall I Go?' He's the Cantor of Sinai Temple in Westwood, California. The traditional music I used during research came from CD compilations of Jewish music I found at Hatikvah Music."

Archival visuals came from a number of sources, ranging from Brandeis University to film libraries in Israel. "The first thing I did," Holzman says, "was to see all the movies made about the Holocaust. I found a great film called *Flames in the Ashes* from Israel, which was made by the Ghetto Fighters. It's completely archival. It was in Hebrew and, although I didn't understand a word of it, I used it as a source and we were graciously given access to all of it. Yad Vashem, the Holocaust memorial in Israel, has a volume of pictures which we also used. We contacted archives and sought out public domain materials; we even got some shots from Leni Riefenstahl.

"As I put the pieces together, I would accumulate a cer-

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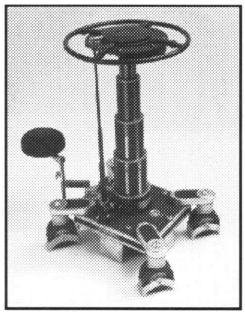

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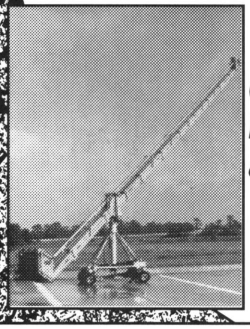

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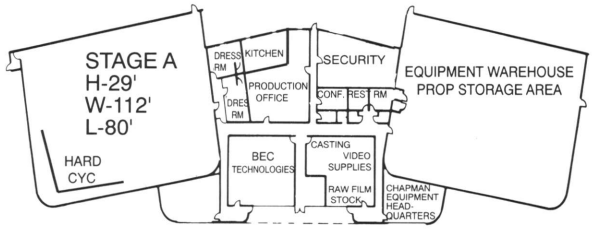

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tain number of edits and then cut away to archival footage. If I made a number of edits in the testimony in fairly quick succession, I would have to stay with archival footage for a significant time. The key was to dissolve the faces into motion in the archival footage, or into a suitable still, or into a moving still to enhance the emotion being expressed. I had to wend my way in and out of the dialogue in the most expressive way. There may be instances where the survivor is only on camera for a few frames without there being some kind of superimposition."

Most of the material is in black-and-white, although some of the survivor artwork was done in colored media. These pieces are shown in full color.

"As far as labwork goes," Holzman says, "there were a few times when we cleaned up some major white specks by covering them up on-line with black or dark gray. The footage is old and it gains by looking old. There is incredible footage from the Warsaw Ghetto that is completely scratched, but it's so amazing that you're able to feel the hardship through the scratches. That was generally filmed by the SS, as were almost all the stills. The Nazis were carefully documenting what they thought would be the ideal way to exterminate a race."

As the debut work from the Survivors of the Shoah Visual History Foundation, *Survivors of the Holocaust* marks an auspicious beginning for a valuable historical record. On-line digital technology will ultimately make over 100,000 hours of survivor accounts available to schools, libraries and museums. Beallor and Moll are already at work on an educational CD-ROM, and are also planning the first book based on the foundation's holdings. "Down the road," Moll adds, "we hope to do many more documentaries."

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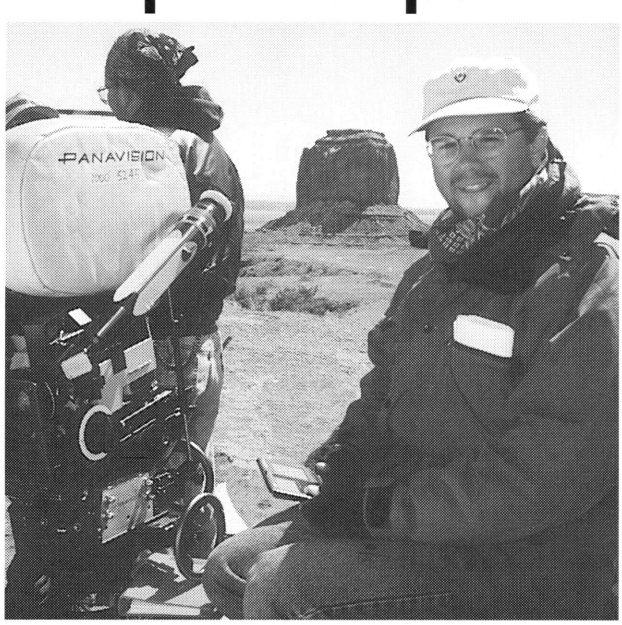

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Hospice Offers Hope

Maysles Films documents the final days of patients confronting their personal moments of closure.

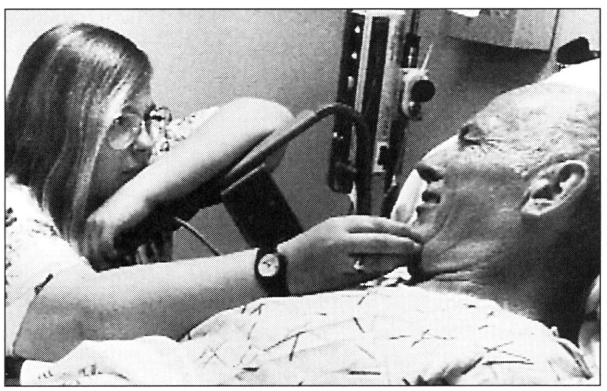
by Brooke Comer

When Susan Froemke of Maysles Films was approached by HBO with the idea of doing a documentary film about hospice care, she didn't know exactly what a hospice was. "I thought it was strictly a place where you went to die. But as we researched the subject, one I had previously avoided, I was intrigued about doing a film on death and dying, and discovered it was something I wanted to explore for myself."

Froemke discovered that her misconception about hospice care was a common one, and that this medical movement in America stood for much more than she had thought. Designed to treat people who have six months or less to live, hospice organizations now exist in every state and major city, enabling people to die at home and providing pain management and psycho-social and spiritual help.

Deborah Dickson, co-filmmaker with Froemke on the award-winning HBO film *Abortion: Desperate Choices*, was ready to team with her again, but initially had some mixed feelings about the project. "I was afraid it would be depressing. But I knew that death was a subject I needed to face. In fact, I'd been struggling with a fiction script about my father's death, which occurred when I was 17. I thought that doing *Hospice* might enable me to uncover and process my own experience. It did that, and a lot more."

Renowned filmmaker Albert Maysles, along with Froemke, Dickson, and the late David Maysles, has explored the vicissitudes of human experience in many works over the past 30 years. Yet he describes the *Hospice* documentary as "the most serious film I've ever engaged in. In too many films today the content is so mindless, the cutting so fast, and the images so 'cinematographic' that [it can be] hard to stay with an emotion for very long. As a consequence, viewers are left with little to take seriously." He believes *Hospice*, which will be broadcast in early spring of 1996, is uniquely appropriate since "it comes at a time when people don't have much opportunity or incentive to ponder as they watch films; [as a result,] they tend to be left with little to think about afterwards." He believes the film takes the viewer in the opposite direction. "Though there are funny moments in the film, you also experience elements of life that really matter."



Photos courtesy of Maysles Films

"In our culture, we tend to avoid thinking about death," says Froemke. "For the last few decades, care for the dying has been left to medical institutions that aren't really trained to deal with death. They're trained to cure patients." In making the film, Froemke found that "when terminally ill people have their pain controlled, they have an enormous opportunity to work out issues they've left unresolved, and there is the potential to achieve a good leave-taking. Our documentary, filmed in a cinema-verité style, allows you to see how three individuals and their families deal with their unique end-of-life issues under hospice care."

The film crew, always at a minimum, consisted only of Al Maysles, manning an Aaton, and Susan Froemke, who determined the shooting situations in addition to recording sound. "Our goal was to get as close as possible emotionally to our subjects without changing in any way the existing dynamics of their environments," says Froemke. She chose the subjects from a list offered by the National Hospice Organization. "It wasn't easy," she says, "to find a family who'd let us enter their lives at such an intimate time." Working closely with Maysles Films researchers Janice Isaac and Michael Sutton, Froemke interviewed the organizers and workers of over 40 hospices, as well as hundreds of patients, before finding three subjects for the film.

Froemke had initially believed that filming one hospice organization would make the most cohesive film, but eventually decided to film in three different areas of the U.S. to get a more diverse look at how hospices operate. In Missoula, Montana, an eight-year-old boy dying of a neurological disease was reunited with his estranged mother; the child died in his mother's arms during the filming. A retired fireman in Santa Rosa, California had a reunion with his daughter after an 18-year estrangement. "As he lay paralyzed by a fatal brain tumor, he realized that this was his last chance to resolve deeply-eroded family relationships," adds Froemke. In Queens, New York, an African-American woman who believed she would be cured through prayer was in denial about her imminent death until her last few days. "The hospice program lets you meet death on your own terms," says Froemke.

Patient Ralph Armstrong and his daughter share a lasting moment in* Hospice. *It proved difficult for the documentarians to find subjects who would allow the intrusion of their camera at such an emotional time.

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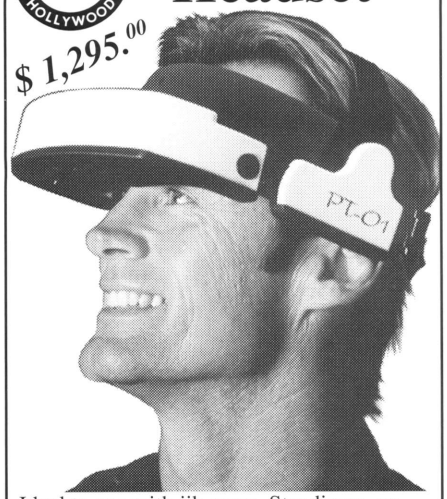

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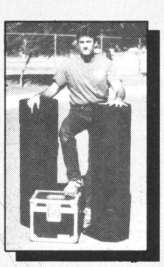

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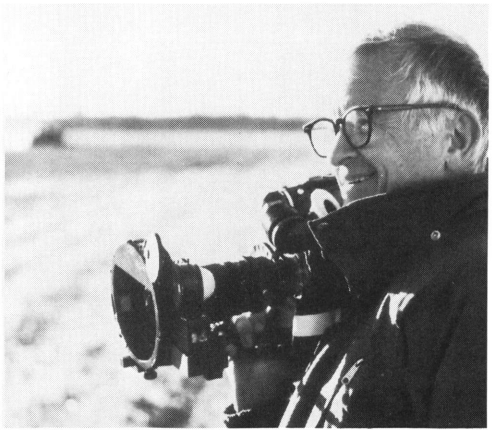
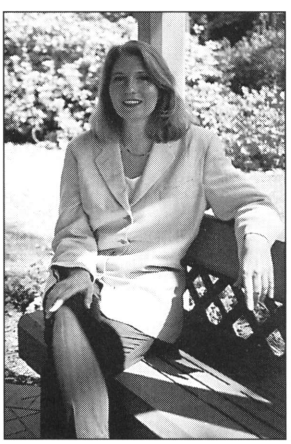


Hospice *collaborators Albert Maysles (top), Susan Froemke (bottom left) and Deborah Dickson.*



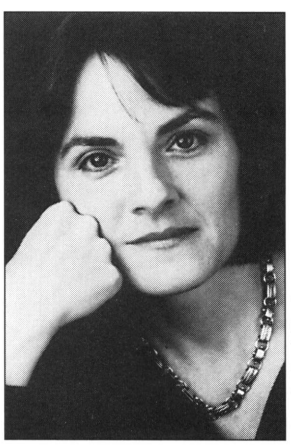


Photo by Burk Uzzle

"But if a dying person reaches true acceptance, there is a recognition that death is not necessarily incorrect, that we are part of a process, part of the universe."

When death is seen as part of the process of life, often with a sense of fulfillment and renewal, some of the taboos that have kept death offscreen diminish. "We go beyond the literal issues, which opens up a whole range of emotions that have not been dealt with before as intimately and realistically as in this film," says Maysles. He points out that in America "we try to distance ourselves from the sadness surrounding death, yet sadness is one of the most profound and stirring of all human emotions. There is something about coming face-to-face with death when it is spontaneously recorded, with natural feelings intact, which is the exact opposite of what most people are used to seeing on film. And this allows the viewer to feel much more a part of the moment."

Maysles believes that the camera should be as mobile and perceptive as the human eye. *Hospice* was shot on 16mm with an Aaton, mostly in small rooms, using one 7-56mm zoom lens, which has a range closest to that of the human eye. Maysles prefers not to use telephoto lenses, which he claims to be an "artificial device that brings you up close, but not really." Using the zoom lens allowed him to get as close to the subject as he desired and at the same time widen out to include as many as three or four people in the room. "The lens was so fast, and the film [Kodak's 98 stock, rated at 500-800 ASA] so sensitive, that very rarely was there a need for additional light, even in dark rooms," he explains.

Dickson, who has worked with Froemke and Maysles on numerous other documentaries, faced the task of cutting 53 hours of film into a 90-minute feature. "The subject matter was so emotionally draining," says Dickson, "that at first it was very hard to keep working with it for eight hours a day." But at a certain point in the process, something changed. "I'm not sure if it was my point of view that changed, or if it was something in the film," she describes. "Our third story, which takes place in Santa Rosa, California, deals with transformation. The CEO of Home Hospice of Sonoma, True Ryndes, and the medical director, Dr. Brad Stuart, believe that spiritual transformation is sometimes possible at the end of life. Allowing oneself to fall into despair, and climb out of it, enables people to make changes in eroded family relationships and

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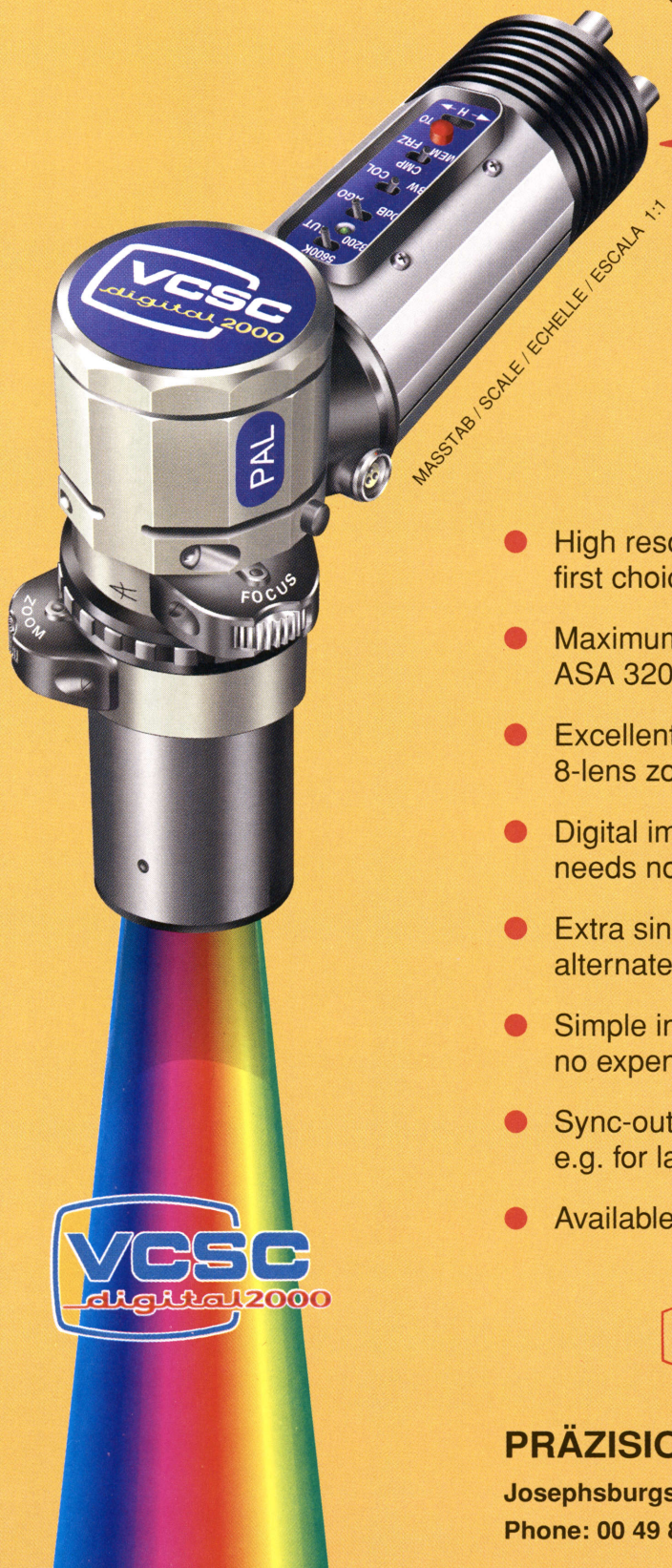

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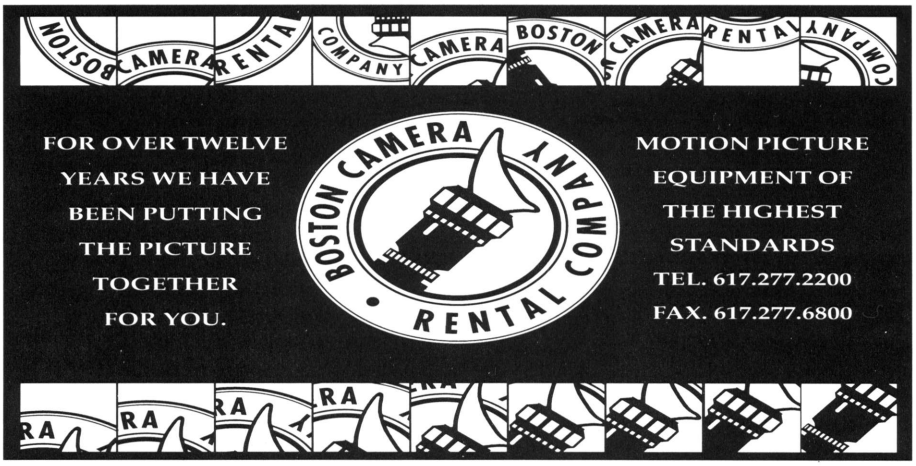
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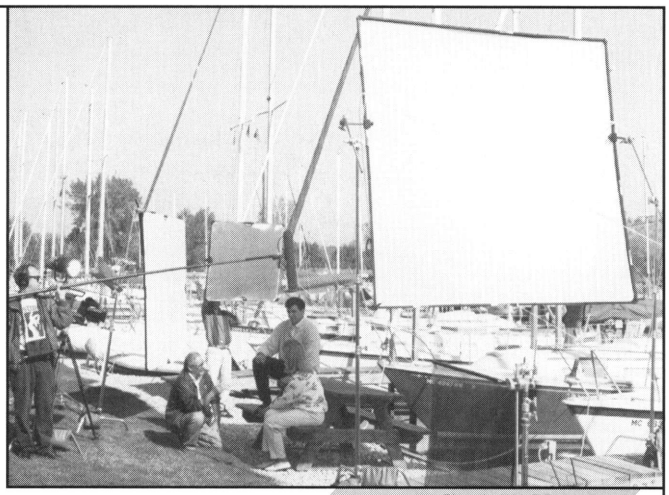

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resolve issues that have constricted them, sometimes for their entire lives."

As Dickson watched the footage, she realized she was listening to an articulation of a philosophy that could be embraced not only by the dying, but by anyone who has experienced a figurative death. "You don't have to be physically dying to understand this," she says. "You may have gone through the death of a love affair, the death of identity or ego. People go through such personal traumas all the time."

The notion of transformation came as a turning point in the filmmaking, giving Dickson and Froemke a handle on how to process the other stories. "This final story isn't the most dramatic or the most emotional, but it does possess an intellectual, spiritual message that reverberates through the other stories," notes Dickson. "Ideally, this will help viewers in the same way it helped us."

Dickson spent seven months editing on an Avid. "Seven months is nothing new for us," she explains, "but the Avid was." She'd been reluctant to try the digital editing system "because there's a mind-body connection in the editing process that I'd grown used to while working with film on Steenbecks." But she adapted to the Avid, and found that it expedited her work. "Some producers feel that something can be cut in six weeks instead of six months just because they're using an Avid. I don't think that's true. You can push things around and play with structure more quickly. But you don't think faster, and you don't get your ideas faster. You still need to take the time to live with your material."

In the end, the filmmakers were pleased with the way the three stories came together. "We hope that each of the stories will draw the viewer in so that you feel like a family member, and therefore go through the death experience in a visceral way," says Froemke, "but with the tools to process that emotional journey."

Gaslight Twice Told

Part 2 of 2

Hollywood adds its touch to the hugely successful parlor play, making drastic revisions while creating a classic.

by George Turner

British International Pictures, Ltd. bought the motion picture rights to Patrick Hamilton's hit play Gaslight *and produced it in 1940. It was directed by Thorold Dickinson and starred Anton Walbrook, Diana Wynyard and Cathleen Cordell. A highly satisfying picture, it was acquired and re-edited by Columbia Pictures in 1942 for the U.S. under the title* A Strange Case of Murder *— but ultimately not released. Meanwhile, Broadway director Shepard Traube had obtained rights to produce the play in America. Retitled* Angel Street, *it was an even bigger success than it had been in England. Louis B. Mayer, president of Metro-Goldwyn-Mayer, after hearing a glowing report from his son-in-law, David O. Selznick, decided that* Angel Street *might be a good vehicle for his Viennese beauty, Hedy Lamarr. And so. . .*

MGM's agents approached Traube, who expressed his regrets that he was unable to offer MGM the motion picture rights, because they had already been acquired by British International, and his arrangement with the author was for the stage play rights only. MGM then acquired film production rights from BIP, including the negative and prints of their version. MGM wanted to use Traube's title, *Angel Street*, but was unable to reach an agreement on its value, which also meant sacrificing Traube's magical scene in which the detective, calling secretly on the abused wife, leaves his hat in the room when making a hasty departure, then returns to retrieve it — a moment that generated a frenzied reaction from the audience during each performance.

John L. Balderston, playwright of *Berkeley Square* and the American movie adaptations of *Frankenstein* and *Dracula*, wrote an early script, while John Van Druten and Walter Reisch later added more glamour and romance to shape it into an MGM-style production. Arthur Hornblow, Jr., a first-rate producer, was put in charge, and Vincente Minnelli was named to direct. Mayer's first choice for the leading lady, Hedy Lamarr, refused the role, as did his second choice, the elegant Irene Dunne.

Hornblow conferred with his friend, David O. Selznick, and the two agreed that Ingrid Bergman, a Selznick contractee from Sweden and a great audience favorite, should play Paula Anton, the film's harried wife. Selznick personally conducted negotiations to loan out Bergman at three times the salary he was paying her, convinced Hornblow that French matinee idol Charles Boyer would be perfect as her sinister husband, and also agreed to lend Joseph Cotten as the detective. He then argued that George Cukor, just released from military duty, should direct the picture (because of his well-known ability to get great performances from actresses), and also insisted that MGM hire cinematographer Joseph Ruttenberg, ASC to shoot the picture. *Sold!*

None of the players resembled in the least what the writers had in mind. The villain was intended to be taller and more saturnine (Boyer was of medium height and a charmer), his wife thin and pale (Bergman was 5′ 8″ and broad-shouldered, an expert skier in robust health), and the detective a tough old vet aptly named Rough (Cotten, as the renamed character Brian Cameron, was a young, smooth socialite). Cukor was delighted to have glamorous stars and a strong heroine, but Van Druten was so outraged that he fled to his Palm Springs ranch to sulk. Reisch remained with the director to handle changes in dialogue and business. Principal photography commenced in August of 1943 (after two days of rehearsals with a generous 54-day schedule) and wrapped on November 17.

Bergman and Cukor clashed right at the start. As he was re-stating some detailed instructions,

***Cinematographer Joseph Ruttenberg, ASC shows film clips to Ingrid Bergman on the set of MGM's* Gaslight.**

Right: ***Nancy (Angela Lansbury) flirts with her master, Gregory Anton (Charles Boyer).***
Below: ***Cameron (Joseph Cotten) shows Paula (Bergman) the "missing" brooch.***

she cut him off sharply with an angry "I'm not stupid!" She wanted to stay up nights to achieve a hollow-eyed look, but he insisted that she remain strong and glamorous. When she tried to underplay in the Swedish manner, Cukor bawled her out unmercifully and demanded more bravura.

MGM's *Gaslight* borrows some embellishments first introduced by the British International version. The titles again are superimposed over a gaslight flame. The villain again is a foreigner, Sergius Bauer of Prague, alias Gregory Anton, who still has a wife left behind there. The house and environs are very similar, but art director William Ferrari provided a considerably more stylish neighborhood, expanded and embellished via perfect matte paintings by Warren Newcombe's artists. The interiors are less confining, but German-born decorator Paul Huldschinsky loaded them with enough Victorian detail to emphasize their oppressiveness. Several of BIP's other innovations — the piano concert, some of the street scenes, and Paul's shadow as he frantically rips up the furniture — were also retained.

Entirely new, however, is a 35-minute establishing story showing Paula as a confused 14-year-old (played by Judy Ford) being taken from the house following the murder of her aunt, a famed opera singer. Fifteen years later, while studying voice in Italy, she falls in love with Gregory Anton (Boyer), a pianist. After an idyllic honeymoon at Lake Como, he talks her into returning to live in the murder house. Here the romantic mood slowly turns ominous and the action depicted in the play begins.

Another original major sequence depicts the Antons' visit to the Tower of London, where Gregory's pathological love of gems is established as he ogles the crown jewels and comments, "Jewels are wonderful things. They have lives of their own."

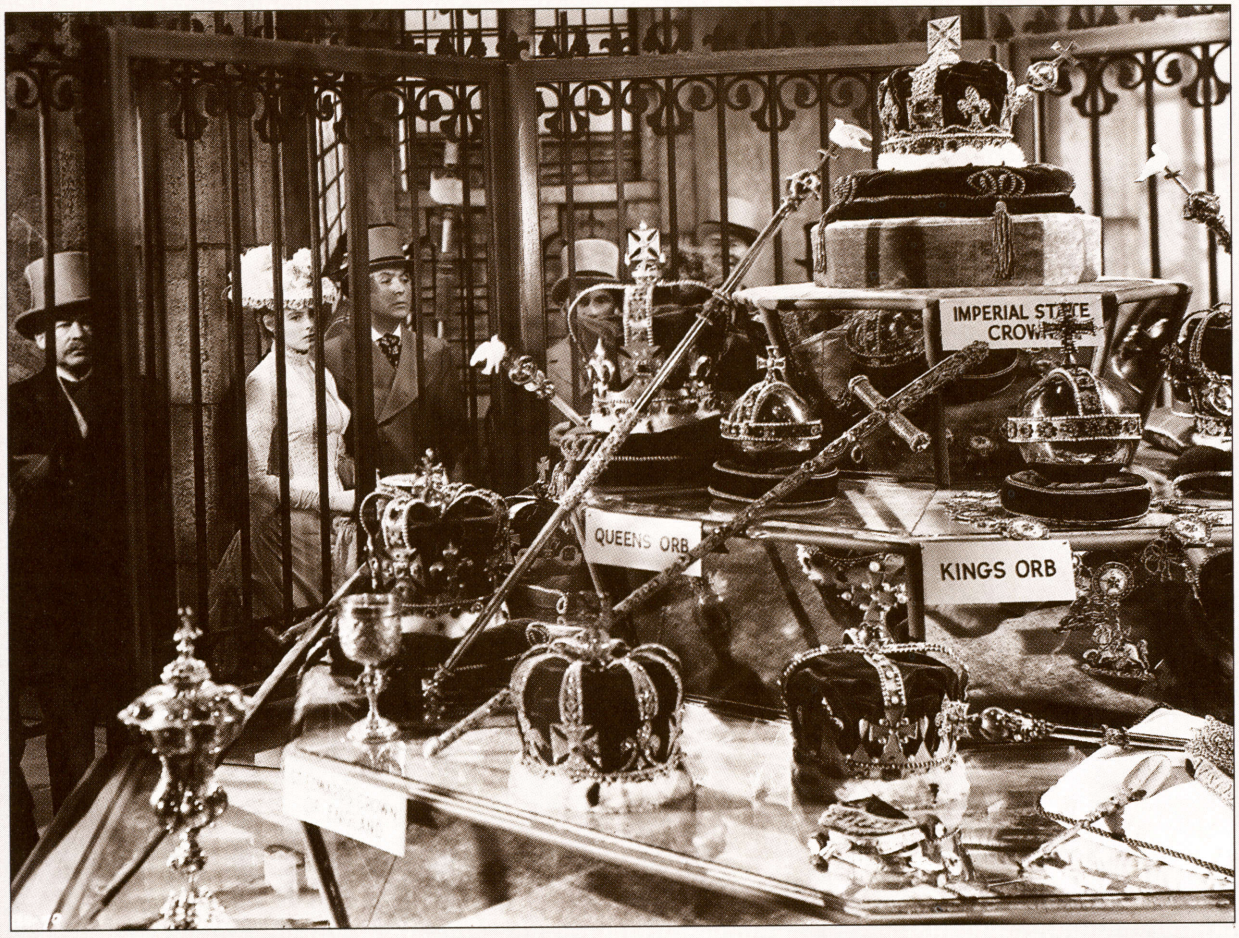
The piano recital sequence was replicated almost intact, but the room was expanded to a large conservatory with a vaulted (matted-in) ceiling. The scene also included more dress extras and the renowned pianist Jakob Gimpel at the keyboard playing Beethoven's "Appassionata" sonata.

An entirely new character is the nosy Miss Thwaites, an elderly murder fan nicknamed "Bloodthirsty Bessie." Played wonderfully by Dame May Whitty, she provides the comedy relief neither playwright Hamilton nor BIP had thought necessary.

One might have expected MGM's approach to end in disaster. Boyer's French pronunciations no more suggest Prague than Bergman's Swedish accents conjure England or Italy, nor does Cotten seem at all British. Boyer's popularity as a great lover, exploited in the new first half-hour of the film, could have made it difficult for audiences to accept him as a fiend. In addition, the picture's greater length and Dame May's comedy could have killed the suspense.

None of these things mattered in the end. The anomalous accents bothered no one, nor did Bergman's radiant appearance. The protracted Italian sequence gave patrons the glamour they sought from a Boyer-Bergman film, and made Anton's evolution from lover to louse seem more insidious than ever. Even Boyer's heavy-lidded "bedroom eyes" smolder equally well for romance or menace, and some insinuating head-tilts emphasize his increasing mental imbalance. The longer running time — 30 minutes past its predecessor's — actually proves an asset, fully showcasing the performances and production values, while Dame May's intrusions are well-timed to ease audience tension over the longer haul.

Unexpectedly, 17-year-old Angela Lansbury also proved a sensation as the Antons' maid, Nancy. Fleeing the Nazi blitzkrieg, the performer had come to Los Angeles from London with her mother, actress Moyna MacGill, and two brothers. All were working at Bullock's Wilshire Boulevard store during the Christmas rush. For some weeks, Cukor had been testing actresses for the role when Van Druten brought Lansbury to him for a screen test. She was at first thought too young, too tall, too plump and not sexy enough. A second look at her test a week later reversed the director's opinion so strongly that he had her take a second, and even better, test. She was not only given the part, but a seven-year contract at $500 a week. Cukor was so delighted that he had the writers enlarge her role. In the BIP film, Cathleen Cordell had made Nancy a gleefully aggressive tart; Lansbury's Nancy is a sullen, drooping, amoral Cock-



Paula and Gregory Anton view the crown jewels in the Tower of London.

ney who says, "I can take care of myself — when I want to." Cukor was astonished at her professionalism and how, on the first day of shooting, she was able to transform into the character instantly, seeming to become a different person who was "a little lopsided." She was as tall as Bergman, and — like Boyer — wore platform shoes to appear more menacing. In the 1978 tribute to Cukor at the Lincoln Center, Lansbury said, "I was really very young and I didn't know my ass from a hole in the ground." But she was no "flash in the pan"; she has had a distinguished career in films (including three Academy Award nominations) and is, 51 years after her *Gaslight* debut, both star and executive producer of the long-running TV series *Murder, She Wrote*.

Lighting cameraman Bernard Knowles' photography for BIP was excellent, but Ruttenberg's (with the aid of then-assistant Harry Stradling Jr.) for MGM is extraordinary. The lighting subtly builds an atmosphere of mounting terror without resorting to flashy tricks. Particularly, the fog effects in the night street scenes are much better than in the British film, in which the mist has a superimposed look.

Selznick, at the request of producer Hornblow, continued as unofficial advisor on the production. Several scenes were retaken as per his suggestions, including Paula's harangue at Gregory at the end, which is much tamer than the Wynyard-Walbrook encounter in the BIP film. Gregory's roughhouse with the police is reduced to an off-screen scuffle, and Paula's dialogue comes direct from the play: "If I were not mad I could have helped you. . . But because I am mad I have hated you, and because I am mad I am rejoicing in my heart — without a shred of pity, without a shred of regret — watching you go with glory in my heart!" Bergman plays the scene as a strong woman with a fierce, head-tossing reading that bespeaks righteous anger rather than madness. Boyer, instead of lapsing into dementia as did his BIP predecessor, is only momentarily alarmed and calmly delivers an almost gallant exit line: "I don't ask you to understand me. Those jewels were always between us, like a fire, a fire in my brain that separated us. Those jewels that I wanted all my life. I don't know why." The sequence falls short of what Diana Wynyard and Anton Walbrook made of it in the 1940 film, but, like almost everything else in MGM's *Gaslight*, it works. The biggest "almost" is a clumsy attempt to suggest a budding romance between Bergman and Cotten under impossible circumstances.

The crowning polish is provided by Bronislav Kaper's moodily intense musical accompaniment, built upon "The Last Rose of Summer," which is idyllic during the early scenes and growls ominously as the plot thickens.

Gaslight brought Academy Awards to Bergman, Ferrari and art department head Cedric Gibbons, as well as Huldschinski and his boss, Edwin B. Willis. The battle with her director over, Bergman thanked Cukor for his "help and understanding of my

Right: ***Dance director Charles Walters gives Bergman a few pointers for a scene in which she executes an impromptu dance characteristic of the story's era.***
Below: ***Paula angrily berates Gregory after his capture.***

poor Paula." Boyer, Lansbury, Balderston, Reisch, Van Druten and Ruttenberg all received Oscar nominations.

MGM quickly released *Gaslight* in England under a new title, where it was met with cries of outrage. A London newspaper reported, "A great deal of feeling has been stirred up by the Boyer-Bergman *Gaslight*, now running at the Empire Theatre under the title *The Murder in Thornton Square*. A British company filmed the Patrick Hamilton play four years ago. . . We thought it one of our better wartime jobs and hoped the American movie critics would get to see it. We gather they didn't. . . Even that might have been all right with us, but the British rights to the story were sold at the same time, presumably to clear the home market for the Hollywood picture. Even the British, it seems, must forget there was ever another *Gaslight*. It is stated that the negative and every copy of the film was destroyed — except for one (possibly) forgotten print in the library of the British Film Institute. People who worked on *Gaslight*, most of them now in the services, not unnaturally feel this is hardly the best way to encourage the production of native pictures." Other British writers called MGM's version "a travesty," "grossly overblown and less effective," and "bloated and overlong."

Ironically, the BIP *Gaslight* suffered similarly prejudicial treatment in 1953, when a re-edited incarnation was finally released in the U.S. Most American critics liked it, but some compared it very unfavorably to the MGM version. Also, for legal reasons, the title had to be changed, reverting back to Broadway producer Shepard Traube's own re-titling of Patrick Hamilton's original play: *Angel Street!*

All of this is unfortunate, as each film, in its own ways, is a great show.

Gaslight (1944)

A Metro-Goldwyn-Mayer *picture; directed by* George Cukor; *produced by* Arthur Hornblow, Jr.; *screenplay by* John Van Druten, Walter Reisch & John L. Balderston; *based on the play by* Patrick Hamilton; *director of photography,* Joseph Ruttenberg, ASC; *musical director,* Bronislav Kaper; *piano solo,* Jakob Gimpel; *recording director,* Douglas Shearer; *art director,* Cedric Gibbons; *associate,* William Ferrari; *set decorations,* Edwin B. Willis; *associate,* Paul Huldschinsky; *special effects,* Warren Newcombe; *costume supervision,* Irene; *associate,* Marion Herwood; *make up created by* Jack Dawn; *film editor,* Arthur Williams; *assistant director,* Jack Greenwood; *dance director,* Charles Walters; *vocal coach,* Arthur Rosenstein; *assistant cameraman,* Harry Stradling, Jr.; *special advisor,* David O. Selznick; Western Electric *recording. Running time, 114 minutes. Released May 11, 1944.*

Gregory Anton, Charles Boyer; *Paula Alquest Anton,* Ingrid Bergman; *Brian Cameron,* Joseph Cotten; *Miss Thwaites,* Dame May Whitty; *Nancy,* Angela Lansbury; *Elizabeth Tomkins,* Barbara Everest; *Mario Guardi,* Emile Rameau; *General Huddleston,* Edmund Breon; *Mr. Mufflin,* Halliwell Hobbes; *Williams,* Tom Stevenson; *Lady Dalroy,* Heather Thatcher; *Lord Dalroy,* Lawrence Grossmith; *Budge,* Eustace Wyatt; *Wilkins,* Charles McNaughton; *Paula (age 14),* Judy Ford; *Turnkey,* Alec Craig; *Policemen,* Harry Adams, Pat Malone, Joseph North; *Servant,* Gibson Gowland; *Guide,* Leonard Carey; *Miss Pritchard,* Joy Harrington; *Young Girl,* Phyllis Yuse; *Lady,* Lillian Bronson; *Butler,* Arthur Blake; *Footman,* Arnold Bennett; *Valet,* Eric Wilton; *Bits:* Al Ferguson, Clive Morgan, Maudze Fealy, Elsie Prescott, Wilson Benge, Bobby Hale, Simon Olivier, Alix Terry, George Nokes, Guy Zanett, Al Masiello, Antonio D'Amore, Joseph Romantini, John Ardizone, Frank Eldredge, Major Frank Baker, Tom Hughes, Florence Benson.

Valuable information for this article was provided by Sam Gill of the Margaret Herrick Library of the Academy of Motion Picture Arts and Sciences, Harry Stradling Jr., ASC, the late Joseph Cotten, the late George Cukor, and the late Joseph Ruttenberg, ASC.

Winging It with a Small Budget

by Mary Hardesty

The assignment was straightforward: "Make a bat your friend, but do it on a tight budget." So said the Chicago Field Museum to cinematographer Brad Sellers, who was hired to create television spots promoting the museum's bat exhibit, "Masters of the Night," which is currently on loan and rotating to other natural history museums nationwide.

Sellers has made a name for himself in Chicago as a low-budget commercial/music video cinematographer, and has also shot shows for HBO and Comedy Central. In the two 30-second spots for the Field Museum, Sellers manages to give a bat's-eye view of the special exhibit, along with the exhilaration of youngsters discovering the museum and its many treasures.

"These were very low-budget spots, but they wanted to get the point of view of a bat swooping down on the museum," explains Sellers. "From the beginning, we had to design the spots around our limitations and the resources we had. We used 16mm, and a number of people worked at reduced rates, which allowed us to shoot the spots and the exhibit footage for $30,000."

With that small a budget, it looked as if real bats and helicopters were out of the question. "Since a bat wrangler's salary would eat up a lot of our budget and helicopters were prohibitively expensive," he says, "we decided to add special effects and graphics in post to give the illusion of bats flying."

Sellers worked with *Batman Forever* movie trailer director Larry Bessler to come up with an effective yet economical way to shoot the spots. "We had shot a scene from a bat's POV inside the underground pedestrian tunnel to the museum for the opening sequence, but as it turned out, someone at the Field Museum got us the use of a free helicopter at the last minute. We weren't allowed to use its camera mounts, which were specifically rigged for one of the local TV stations, so we took off the door and I strapped myself and the camera in. I'm not that nuts about flying outside helicopters, but we got lucky and had perfect weather and a great pilot. We shot right at sunrise and there was no wind. In the time allotment we had, we were able to do a few passes, and because it was 5:30 in the morning, we got away with flying a bit lower than normal."

Sellers did the aerial work using an Arri SR with a zoom lens, shooting at different speeds during each of the three passes. "The take we ended up using for the approach shot was filmed at 32 frames per second," recalls Sellers, who believes the museum will get years of use out of the footage. "They planned to use the television spot not only to tell the public about the 'Masters of the Night' exhibit, but also to reposition the museum as a bright, dynamic, and active place to visit."

The final version of the opening sequence of a bat swooping into town and into the museum's exhibit comprises four shots dissolved into each other. "The helicopter shot dissolves to one of a bat's POV of the museum's front steps, which I shot at 18 frames to give it a slightly jerky feel," explains the cinematographer, who added more bat authenticity by handholding the camera and running up the stairs, grazing the top of the steps.

"Then we went inside and did another series of swoopy camera moves that included skimming off the ground, careening off the wall and flying up to a banister, where we cut from the bat's POV to a regular establishing shot of the museum. We shot the bat's POV with an 8mm lens, and even if we had all the money in the world, I would probably still do it that way. Because an 8mm standard lens is so wide, it does a good job of accentuating speed. Inside we went with 18 fps and transferred it to 24 fps to create the effect of bats flying without it looking too cartoony."

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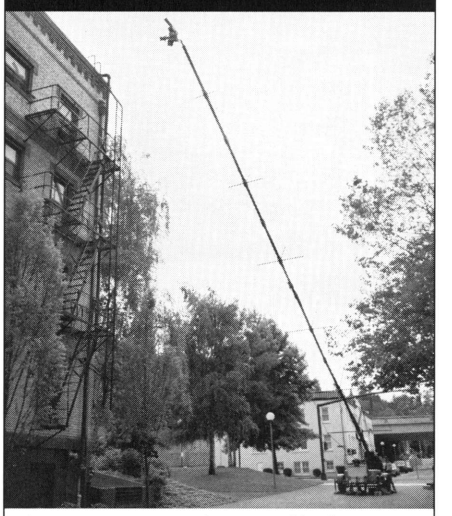

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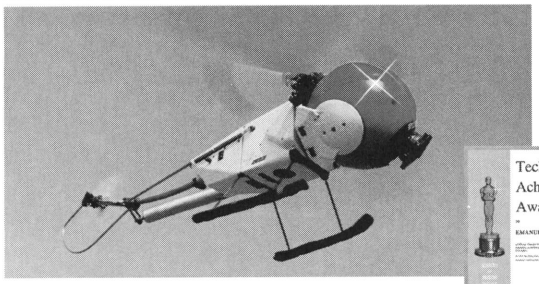

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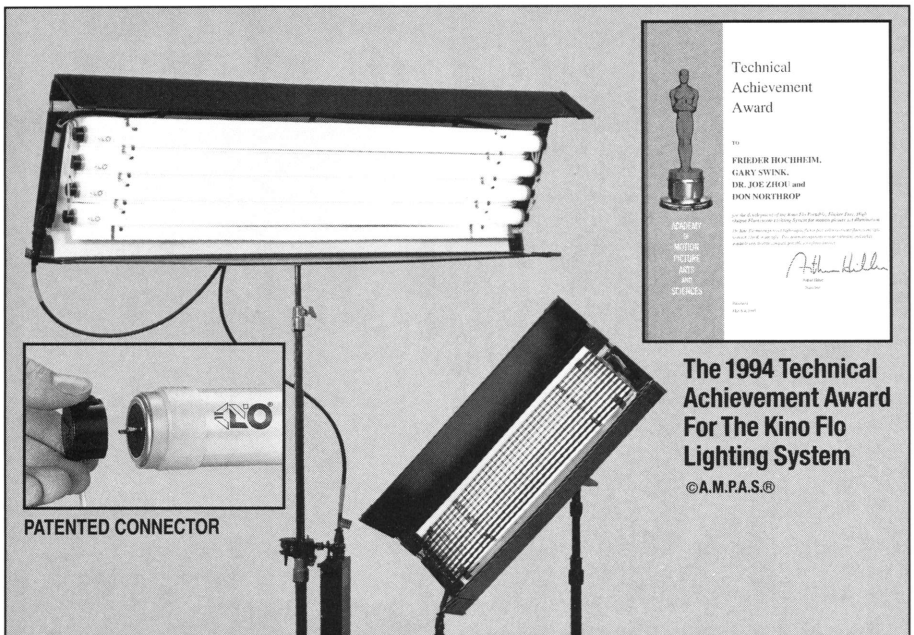

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To create the infrared look associated with bat vision, Sellers used Fuji 250 ASA tungsten film for the exterior shots. "We were lucky enough to be working with Tom Rovak of Filmworker's Club, who is probably one of the best colorists in Chicago," he says. "Before we shot we talked to him about the spots' look and range, and showed him some of our test footage so he could help us determine ahead of time what we needed to do to pull this off. We wanted to remove the image from reality as much as possible, so we turned it into a negative image, slightly stretched the aspect ratio horizontally, and gave it a heavy blue bias to fit the show's theme. I underexposed a bit so the trees would look darker than normal. In post they came out looking whiter, while the white museum facade came out looking dark and foreboding."

Sellers, who had ironically just relocated to L.A. from Chicago, is an Ohio State cinema major who is used to working quickly with small crews and no playback monitors. Despite those experiences, this shoot still threw him a few curves. "Not only were we unable to tie in anywhere inside, but the shoot required 50 minor extras and took place in an exhibit which was not being installed until the day we were shooting," he recalls. "During our scouting days, all we saw was the exhibit being unpacked from crates, so we couldn't think much about camera angles or where we would place the lights. All we could do was suggest ways to set up the exhibit that would make it easier for us to light."

The filmmaker, whose independent feature *Selected Passages* is due out in 1996, has a few words of advice for cinematographers working on tight budgets. "Anyone can succeed if they design up front around their resources," he claims. "Ultimately, what matters is the whole, and not getting caught up in thinking you have to have exactly the right lens or tripod or light style. Don't lose track of your final larger objective."

Credits:
Spot title: "Blowing into Town"
Client: Chicago Field Museum
Agency: RPM Advertising, Chicago
Producer/Director/Editor: Larry Bessler
Cinematographer: Bradley Sellers

compiled by Marji Rhea

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A new THX Screen Channel is now available for auditoriums up to 45,000 cubic feet in volume, allowing smaller cinemas to have the same quality sound as the larger THX theaters. Specifications for this system include a wide frequency range of 40Hz to 20kHz, tight frequency response over the range, high sensitivity and great short- and long-term power handling. Directional characteristics of the low- and high-frequency systems are matched at crossover and stitched together skillfully by a new THX-designed custom electronic crossover. In addition, both the woofer and the compression driver are highly resistant to long-term mechanical fatigue.

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Lavalier Microphones

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The microphone is highly immune to moisture such as that caused by perspiration, making it a natural for theater or outdoor productions. The frequency response has been optimized for speech pickup with a 4 to 6 dB rise at 8 kHz. An inherent low self-noise and extended dynamic range make the microphone ideal for use with wireless transmitters in digital broadcast applications.

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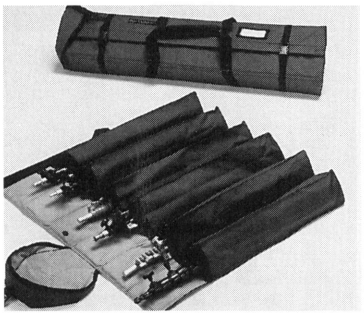

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Dark gray on the outside, the Hexabag features a light gray interior that makes it easy to find smaller objects inside. Hexabag's patented handles are designed with comfortable, extra-long handgrips that provide ideal balance for carrying loads of varying weight distribution. An ergonomic shoulder strap also makes it easy to carry the case golf bag-style.

Hexabag comes in two sizes, for short or long stands. The smaller of the two is 35.4" (90cm) long, with a diameter of 9.4" (24cm) when closed. It weighs 4.4 pounds (2kg).

Band Pro Film/Video, 3403 West Pacific Ave., Burbank, CA 91505, (818) 841-9655, FAX (818) 841-7649.

Tripod Cases

A & J Cases' Utilizer tripod cases are made of rotomolded high-density cross-link polyethylene and feature an anti-roll triangular design offering three handles for easy handling in any position; a telescoping lid with fully recessed quick-release buckle; and an adjustable strap. Seven stock sizes are available, as are optional colors and custom logos.

A & J Cases, 11121 Hindry Ave., Los Angeles, CA 90045, (310) 216-2170, (800) 537-4000, FAX (310) 216-2694.

Super PeeWee III

Chapman's Super PeeWee III includes a Universal Stop Valve and Universal Head with XOX leveling system as its primary new features. The Universal Stop Valve creates smooth feathering stops at any chosen position, top and/or bottom. This new system allows smooth, repeating stops without sacrificing the speed of the arm throughout its vertical travel. Another advantage of the Universal Stop Valve is that it is adjustable. The Universal Head is designed to save time leveling the camera, as well as to allow four different vertical camera positions without camera dismounting. The patented XOX leveling system is an easy three-step procedure that will allow anyone to level the camera quickly and accurately. The Universal Head gives even greater vertical travel of up to 40", while obtaining additional reach, height and lower lens height without removing the camera. The Drop Down accessory attachment allows even lower lens heights while mounted on the Universal Head.

Chapman/Leonard Studio Equipment, 12950 Raymer St., North Hollywood, CA 91605, (818) 764-6726, FAX (818) 764-2728.

Digital Time and Date Slave Display

ESE has two new additions to their Master Clock System family, the ES-126 and ES-127, which allow studios, news rooms and control rooms to display time and date side by side in the same enclosure. Two display sizes make it ideal for visibility up to 50'. Both units feature a 12-digit ESE Serial Time Code Reader that displays six digits of time and six digits of date. Both units are designed to read ESE Serial Code (TC90) from ESE's Master Clocks.

ESE, 142 Sierra St., El Segundo, CA 90245, (310) 322-2136.

Digital Desk for Panasonic Workstation

The Winsted Corporation has introduced a new Digital Desk for desktop editing and production, designed especially to accommodate the popular Panasonic nonlinear A/V workstation. The desk's 94"-wide work surface provides ample space for keyboard, jog pad and other materials. A 48" riser which holds monitors and hard disc boxes is

adjustable from 6" to 10" in 1" increments for ergonomic sight lines. A 24 ½" rack cabinet is included to accommodate Panasonic Postbox rack-mount electronics.

The desk is designed to curve gently around the user, placing equipment within easy reach. Multi raceways channel video and monitor cords out of sight. The work surface and riser shelf are attractive black granite laminate with black contoured edges. Sturdy steel angled legs have black baked enamel finish. Four different accent trim colors are available as optional accessories.

Winsted Corporation, 10901 Hampshire Ave. South, Minneapolis, MN 55438-2385.

Camera Stabilizers

Glidecam Industries' Dual-G is a dual-gimbaled, dual-handled, counterbalanced camera stabilization device that distributes the weight of the system between two operators, and is designed for all cameras ranging from 8 to 22 pounds. The use of a second operator allows cameras in this weight range to be stabilized without the use of a spring-loaded, exoskeletal support arm.

The distance between the two handles can be adjusted to accommodate a variety of shooting styles and situations, the narrowest setting being 13" and the widest over 5'. The upper portion of the central support post includes guide scale markings for accurate and repeatable positioning. A 6" extension post is also included, which allows for fewer counterweights to be used when setting the vertical balance. The base platform can be configured to use counterbalance weight disks (included) if a monitor and/or battery is not being used on the base as counterbalance.

For remote viewing, an LCD TV monitor can be easily attached to a variety of mounting holes on the base platform or a CRT TV monitor can be attached to the monitor bracket. The system allows 360-degree panning and tilting, and can be used with three operators — an especially useful feature for trick shots.

Glidecam Industries, 676 State Road, Plymouth, MA 02360, (800) 949-2089, (508) 866-2199, FAX (508) 866-5133.

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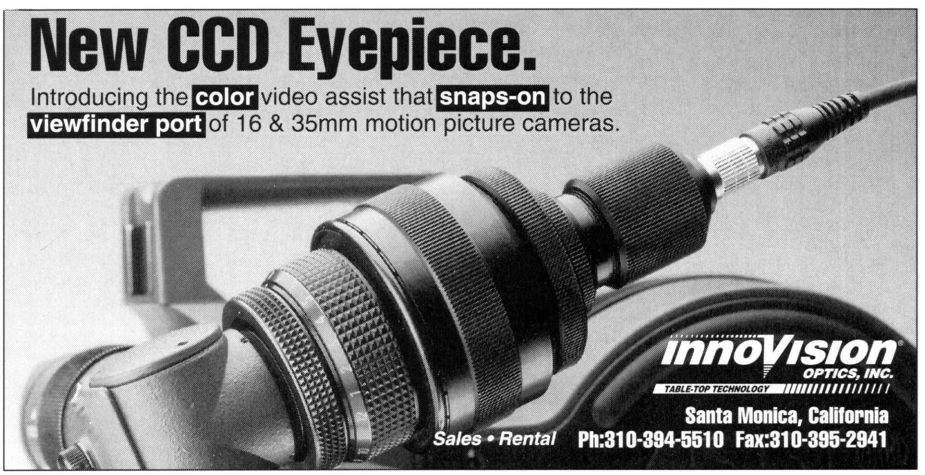

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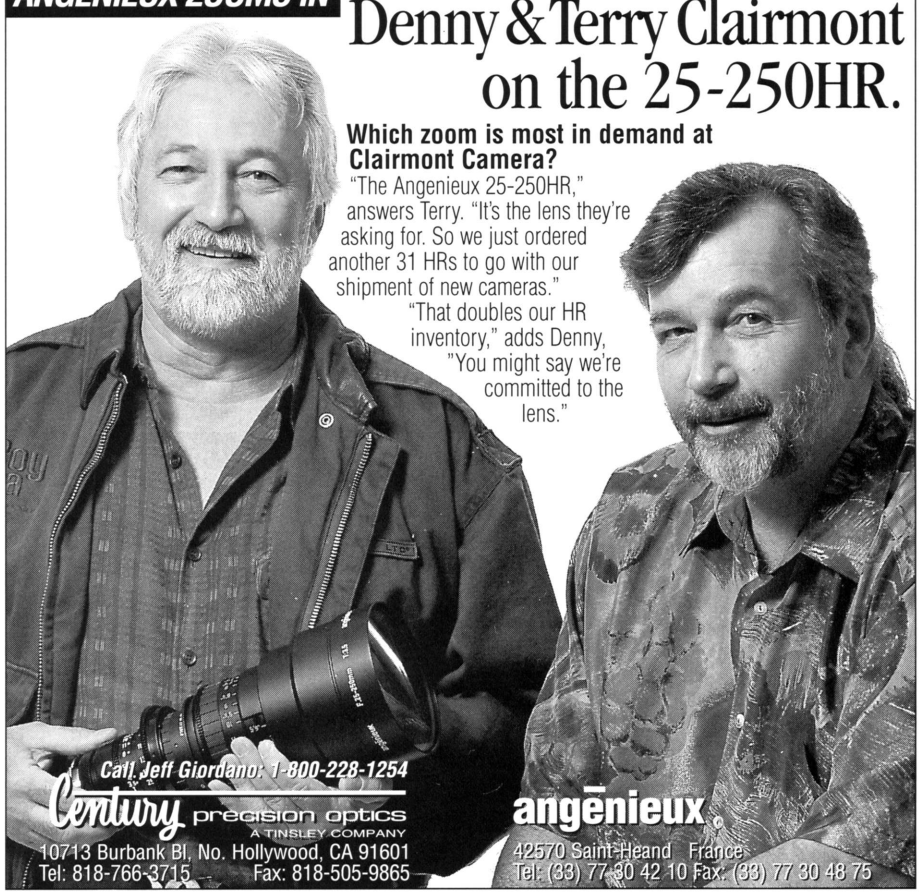

Which zoom is most in demand at Clairmont Camera?
"The Angenieux 25-250HR," answers Terry. "It's the lens they're asking for. So we just ordered another 31 HRs to go with our shipment of new cameras."
"That doubles our HR inventory," adds Denny, "You might say we're committed to the lens."

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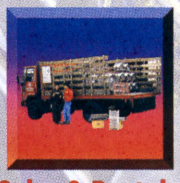
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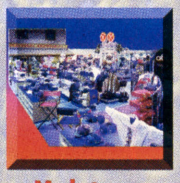
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Laser Pointer

The Laserflex Laser Pointer system and its accompanying universal locking clamp allow the user to project an exact point of light onto the ground anywhere in front of the motion picture camera to aid in precise distance identification for accurate focus pulling. Marks may be positioned along the path of the laser spot at the beginning and ending of a dolly move or several marks may be placed throughout a move for continuous focusing. The laser may also be used in less rigid applications such as with a Steadicam or crane arm. The system includes a nylon soft case and an instruction sheet listing suggested uses.

Garden Designs, (800) 66-DESIGN.

Serial Digital Video Cable, Composite Cable

Gepco International's VSD2001 is an extended-distance, low-loss serial digital video cable. The RG-6 Type coax is designed to provide lower attenuation than traditional precision video cables at current serial digital frequencies.

The VSD2001 has an 18-AWG bare copper center conductor. The dielectric is constructed of high-density cellular (foam) polyethylene that provides an 82% velocity of propagation. The shielding consists of a 100% aluminum/polyester tape and a 95% tinned copper braid.

Also new is the company's VA-1/3 video and audio composite cable, constructed of one video and three audio cables under a flexible yet durable jacket. The cable is ideal for ENG, EFP and CCTV applications as well as connections between equipment in racks. The composite includes Gepco's original VPM2000 RG 59 coax, and three Gepco 61801EZ, 22AWG stranded tinned copper jacketed pairs with an overall foil shield and drain. The audio pair jackets include a bonded easy stripping foil and are colored white, red and green for easy identification. The video cable master is black.

Gepco International, 2225 W. Hubbard, Chicago, IL 60612-1613, (312) 733-9555, FAX (312) 733-6416.

Accessory Block and Lens Light

Cinematography Electronics' Accessory Block allows the use of many

accessories on the Arri 35-3 camera without the usual tangle of cables associated with standard junction boxes. Its low-profile shape mounts to the right-side contour of the camera and features seven connectors, a swing-out tape hook, Arri-style threaded rosette, lens light socket, and brightness control knob. The company also offers a high-intensity lens light that plugs into a dedicated socket on the accessory block.

Cinematography Electronics, 31238 Via Colinas, Suite A, Westlake Village, CA 91362, (818) 706-3334, FAX (818) 706-3335.

Digital Effects Add-On

Pinnacle Systems' Alladin StudioPak Option adds new digital effects and functional enhancements to its Alladin digital video workstation. The new manual highlights capability allows the addition of spotlights, variable light cone size, variable or static position, variable edge softness, and auto or manual highlighting with keyframe support. The trail flare effect is an extension to Alladin's existing motion trail feature, and provides trails on a static object with control over trail direction, color and decay. Strobe provides for a repetitive, variable freeze/unfreeze with selection for video, key or both. Posterize and solarize effects provide variable pixelization of both luminance and chrominance channels. Variable border color provides hue, saturation and luminance adjustments for border colors. The axis cursor allows user visualization of DVE rotation axis on the fly. Other capabilities include separate front and back live sources on rotational effects and an advanced paint package, including typography, Alladin input switching, spline-based shapes, chroma keying, batch mode file conversion and high-speed operation. The package offers support for Microsoft Windows 95 operating systems in native 32-bit mode.

Pinnacle Systems, (800) 4-PINNACLE.

Storyboard Software

PowerProduction Software's Storyboard Artist Version 1.0 helps the user to create storyboards ranging in detail from rough sketches to full-color graphics. The program offers pre-drawn characters that can be oriented in various actions and rotations and shown from

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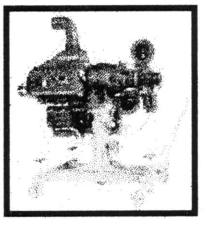

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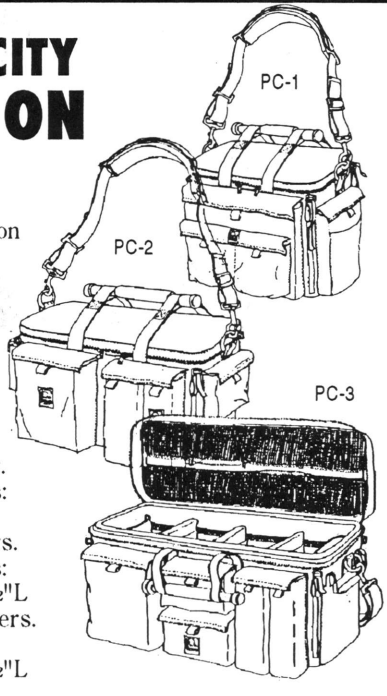

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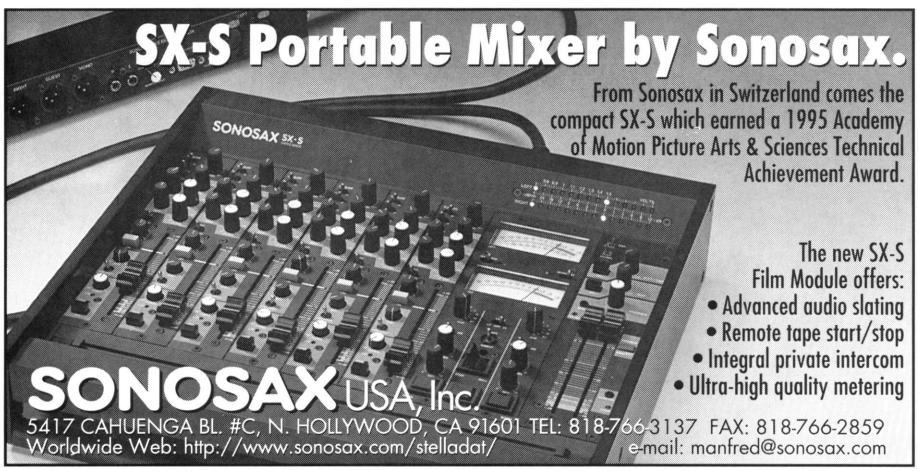

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35 MM REFLEX

The Fries model 435 is a new general purpose MOS production 35mm camera. With its optical printer compatible register pins, steadiness and 150 FPS speed. The 435 is ideally suited for special effects, commercials or any photography where a quality steady image is desired.

The 435 is a spinning mirror reflex camera with a 170 degree blanking shutter. The internal 30VDC motor runs the camera from 2 to 150 FPS forward and 2 to 50 FPS reverse, in one frame increments all crystal. The camera is equipped with take-up and supply torque motors.

There are both 1000 ft. and 400 ft. displacement type magazines. A new feature is the light valve which allows the operator to direct all the light to the viewing system, or to the video assist, or combo which splits the light between both viewing and video assist.

35 mm, Reflex Camera

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The new Fries Director's Viewfinder allows the director to view the full camera aperture .980 x .735, thru the same lenses that will be used on the camera when filming. Why aren't you getting the whole picture?

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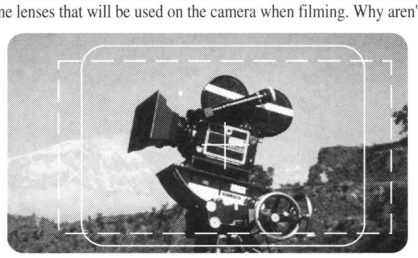

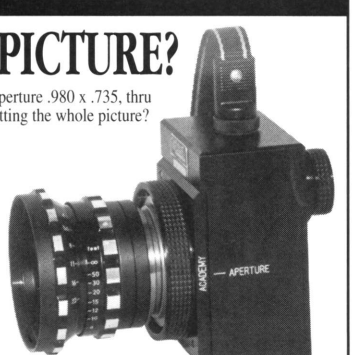

Film Clip: The finder has a set of register pins that will hold a film clip the same as the Fries camera.
Groundglasses: Interchangeable. The same groundglass as is used in the Fries 35R and 35R3 cameras.

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three viewing angles. They can be zoomed in or out and flipped or layered along with built-in props and interior and exterior locations. Art can be added to custom libraries directly from the program.

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Users create frames in any aspect ratio: television, feature film, wide screen, computer screen, 35mm slides, or customizable frame size. Each frame has two caption windows for scene description, dialogue, video description or any other needed information.

StoryBoard Artist runs on systems running Windows 3.1 or better, with at least 4 MB RAM. A 486/33 with 8 MB RAM or better is recommended.

PowerProduction Software, (310) 937-4411, FAX (310) 937-4416, pps@netcom.com.

Lighting Guide

Focal Press' *Motion Picture and Video Lighting, Revised Edition* explores technical, aesthetic and practical aspects of lighting for film and video. Written by a cinematographer/lighting director, the books offers a hands-on approach augmented by diagrams, tables, charts and photographs. Topics include physical light and perception; theory and practice of exposure control; lighting and grip equipment; basic scene lighting; image control; color theory and practice; electric theory and safety; and lighting for video, Ultimatte, and special effects.

Author Blain Brown has lit and photographed a wide range of productions, from tabletops to boxing arenas, no-budget shoestring productions to large-scale features.

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Finding an Audience at the Fort Lauderdale Film Festival

by Brooke Comer

The Fort Lauderdale International Film Festival celebrated its tenth anniversary this winter with an increase in programming, staff and services. "We had a breakout year," says Festival director Gregory von Hausch, who credits sponsor Blockbuster Video for this year's turnout and hopes that the Festival's success will be reflected in the distribution deals won by the Festival's many independent films. "Our goal is to support new talent, because it's hard enough to make a film and distribute it. Filmmakers don't need the extra burden of a festival that thinks it's more important than the films it presents."

Festival winners included *Cold Comfort Farm* for Best Film and that film's director, John Shlesinger, for Best Director; Sean Astin for Best Actor in *Low Life*; Piper Laurie for Best Actress in *The Grass Harp*; *The Monkey Kid* for Best Foreign Film; and *Sacred Hearts* for Best First Feature. *Festival Fever*, a parody of film festivals, won Best Short and *Give a Damn Again* won Best Documentary.

The Pompatus of Love was a favorite in the press circle, and though it did not win a prize, its popularity testifies to the old theory that awards don't necessitate good films, while good films do necessitate awards — sometimes.

Richard Schenkman, director of *Pompatus*, put his film in the Fort Lauderdale Festival "because I think festivals are important for three reasons. Most importantly, you can get a distributor. You can get press that will help publicize your film when it is released, and you can, after a long period of struggling, be feted and hailed as an *artiste*." Schenkman, his producer Jon Resnick — who has risen in the ranks since he line-produced *Spanking the Monkey* — and writer/actor Adam Oliensis went to the Festival believing they had a firm distribution deal, which has since "begun to look dubious," says the director. But he's not worried: he and his team have survived setbacks before, and know that what doesn't kill you makes you stronger.

When Schenkman, Oliensis and friend and actor/writer Jon Cryer came up with the idea for *Pompatus*, they had no idea it would evolve into a 45-location feature filmed in New York and Los Angeles. Scenes required blocking off New York's Times Square, shooting under the Brooklyn Bridge, and dangling one character from a rope 40 feet in the air. "We *tried* to keep it small," Schenkman says.

On the first day of production, the crew turned up at a plumbing supply store location early one morning, only to find the doors locked; fortunately, location manager Eric Barry Klein had a backup location lined up. When cinematographer Russell Fine shopped for a Panavision at General Camera, he found that an influx of big studio films in town had left the shelves bare. Instead, he got a Moviecam Compact. "It's actually a Moviecam body that they send out as a Steadicam body on a Panavision movie," he explains. "But it gave us everything we needed. It was lightweight, it had a great viewfinder, and I could make quick changes between handheld and studio mode."

Camera moves were moderate to low key except for two crane scenes that would have been too expensive without Scott Buckler, who makes and rents cranes to New York's independent community. "Scott has a hothead camera remote that looks like an old Noridge refrigerator, complete with huge wheels," says Fine. "We could hang the camera off the side of a building, which added a lot of pep to a particular scene."

Most of *Pompatus* was filmed at low light levels, "because we didn't have a lot of lighting equipment," Fine explains. "Having a nice, bright viewfinder

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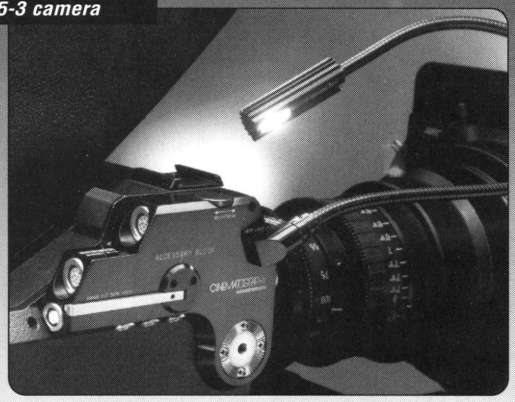

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turned out to be great, because it helped me compose shots in less than optimum circumstances." *Pompatus* used practical locations, and without a few 12Ks to put outside windows to light up a room, Fine had to mix natural light with smaller lighting units. "The largest units I used were 4Ks," he recalls, adding that he lit half of the film's close-ups with $5 Chinese lanterns and $2.50 lightbulbs.

Schenkman prefers fewer lights to more. "Fewer lights create a prettier and more natural picture," he explains. "And Russell can make a scene look beautiful with one bulb and a bounce card. He lit one of the prettiest scenes in the film, which was shot in Times Square, with one 1K light and a silk."

Fine and Schenkman had worked together before on various commercial, cable and music video projects and had developed a kind of teamwork that allowed them to make quick decisions based on a mutual understanding of each other's ideas. During preproduction meetings, they'd agreed to give *Pompatus* the high-value, high-production look of a studio picture, and they began filming according to carefully constructed shot lists. "Then," says Fine, "we realized we could pretty much improvise just as well. We had a good rhythm. We could enter a scene, see how it blocked out with the talent, and quickly decide how we wanted to cover it."

Even when the director and cinematographer knew exactly how they wanted a scene, fate had a way of intervening. "We had Times Square locked off," Schenkman explains. "Hundreds of spectators were watching, held off by first-time production assistants. Then, at 9 p.m., the generator blew. At that hour, we couldn't get a replacement." Fortunately a policewoman assigned to the set sanctioned the only possible solution: Fine tied in to the base of a lamppost and lit the crucial scene with one 1200-watt light, the maximum he could draw without blowing out the power in every adult video store in Manhattan's red-light district.

Will *Pompatus* remain on the festival circuit? "Absolutely," says Schenkman. "When I was interviewing for a studio job recently, it helped tremendously to have so many positive reviews from the Fort Lauderdale Festival and other festivals. And later on, when the film comes out, *Pompatus* will already have its champions."

Books in Review

by George Turner

Robert Wise on His Films
by Sergio Leeman
Silman-James Press,
224 pps., paper, $24.95

Last June, feeling strongly that a book about Robert Wise was long overdue, we enthusiastically welcomed "Robert Wise, a Bio-Bibliography" by Frank Thompson. Now, it's a pleasure to note, we have another major work about this multi-talented director and good citizen. Leeman's volume takes a different POV than its predecessor and is richly deserving of attention. The author offers a brief biography and overview as well as forewords by Arthur Hiller and Nelson Gidding, but the main focus is on the pictures Wise directed.

Wise contributed strongly to the tome, and his own comments accompany each entry. Unlike many artists, he has a good perspective of his own work and accords certain of his early efforts the same kind of attention he gives the blockbusters of his mature years. Thus, superfilms like *West Side Story* and *The Sound of Music* are not permitted to obliterate the charms of less elaborate but still important works such as *The Body Snatcher, Born to Kill, Blood on the Moon* and *The Set-Up.*

Wise tells of his youth and of how in his years as a film editor at RKO Radio he occasionally directed extra scenes and pick-ups. His first experience in this discipline turned out to be a painful one: he had to edit and partly direct the studio's revisions of Orson Welles' *The Magnificent Ambersons* while the director was away on location. Welles, his friend and mentor, was not pleased.

He also mentions doing a sequence with John Garfield for *The Fallen Sparrow.* (Here's an unmentioned aside for the completist: he also directed the closing sequence of *Action in Arabia* with George Sanders and Virginia Bruce.) In 1943, while editing for Val Lewton's unit at RKO, Wise was given the job of directing most of a work in progress, *The Curse of the Cat People,* the first of his 40 directorial credits.

From there, the book recounts a well-deserved success story. Along the way, Wise notes, "I usually cast my cinematographers for the kind of look I want in the film." Throughout the pages, he speaks often of their contributions.

A minor squawk: there are several incorrect names in photo captions. A major squawk: what, no index? It's a good book; an index would make it even better.

Thomas A. Edison and His Kinetographic Motion Pictures
by Charles Musser
Rutgers University Press,
70 pps., paper, $14.95

Controversy surrounds the career and accomplishments of Thomas A. Edison (1837-1941), and in all probability it always will. During the first half of the century he was regarded as an all-American hero, the lone genius who invented the electric light, the phonograph, the dictaphone, and motion pictures as we know them. He received more awards and medals than he could carry and was the first Honorary Member of the ASC and of the Academy of Motion Picture Arts and Sciences.

Revisionist historians more recently have given Edison the same kind of debunking they have accorded Wild Bill Hickock, Gen. George A. Custer and Belle Starr. He has been depicted as a villain who lied, bullied, cheated and may have been implicated in the disappearance of a French rival. He has also been reviled as the architect of the infamous Motion Picture Patents Company, which led to industry warfare. Besides turning the black limelight on his less charming personal attributes, his claim to having invented the movies has been attacked, with the palm variously awarded to foreign inventors or to the men Edison employed to carry out his ideas.

Musser, an assistant professor of film studies and American studies at Yale, presents a more balanced view, hovering somewhere between the idolators and the debunkers.

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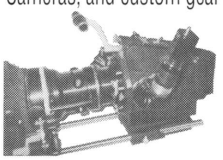

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This slim but attractively designed monograph was published for the Friends of the National Historic Site, in West Orange, New Jersey. It is heavily illustrated with stills and frame enlargements, including some that have appeared in many a film history book and a great many that are not familiar.

Hollywood Movie Stills: The Golden Age
by Joel W. Finler
Batsford/Trafalgar Square, 192 pps, paper, $24.95

Hand a lover of movies an oversized book filled with hundreds of old stills from the big Hollywood studios and he or she will forget all about O.J. Simpson, global warming, corporate takeovers and the information superhighway. This nifty item from England has literally hundreds of stills, including many rare ones, of all kinds. There are star portraits, cheesecake shots, scene stills, production scenes, trick shots, collages, advertising photos, set stills, candids and frames capturing special events. They variously provoke nostalgia, wonder, humor and wishful thinking about the movies we didn't get to see.

And there's more. A well-written text describes the history of still photography, enlivened by comments from practitioners of the art about their working methods and experiences. The photographers are identified where possible, and many of the most prominent names are represented, including Coburn, Bull, Hendrickson, Parrish, Fryer, Kahle, Hurrell, Longet, Korman, Fraker, Louise, McAlpin, Powolny, Richee, Walling, Phyfe, Bachrach and others.

As is to be expected in a large-scale work, there is the occasional blooper. Brothers Roman and Jack Freulich are lumped together as Roman "Jack" Freulich; Jack was the father of Henry Freulich, ASC and all three were still photographers at Universal. Arthur Edeson, ASC, shown photographing Humphrey Bogart and Ingrid Bergman in *Casablanca,* is identified as Ernest Haller, ASC. There is also a reference to "a double exposure special effect known as a 'hanging miniature.'" But — what the heck! — it's a delightful book filled with little-known facts about the evolution of movie stills and enough rare photos to keep one smiling.

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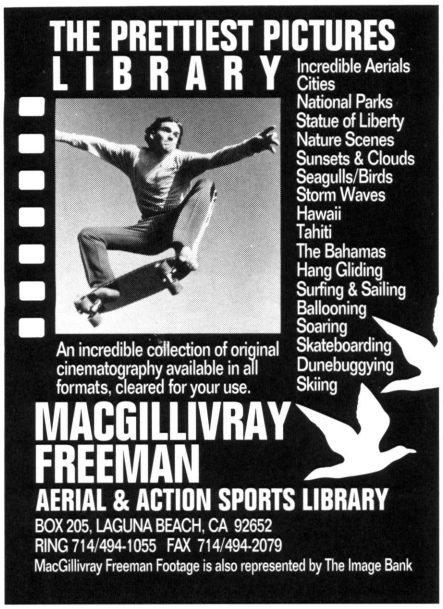

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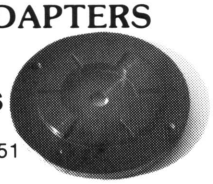

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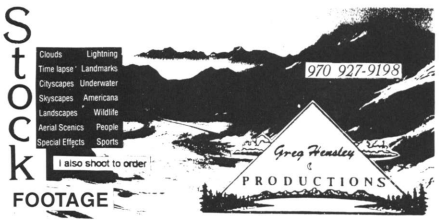

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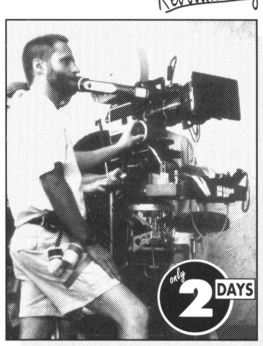

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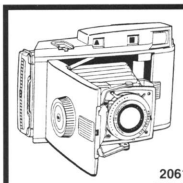

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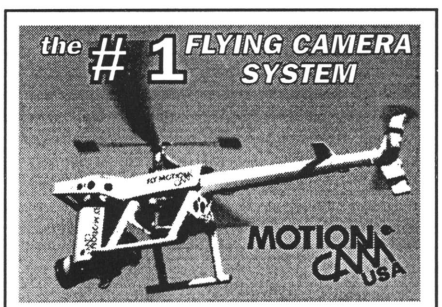

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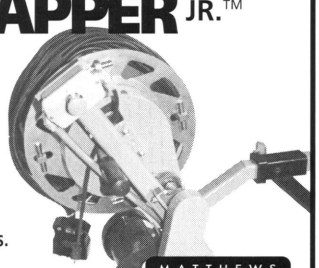

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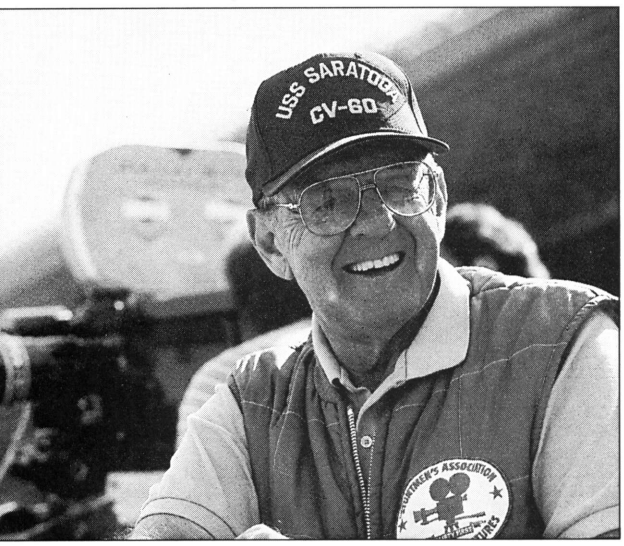


Richard A. Kelley, ASC, a distinguished cinematographer whose career in motion pictures spanned a half-century, died from complications of a stroke on November 2 at his home in Burbank, California.

Born in Aberdeen, Washington on October 6, 1914, Kelley arrived in Los Angeles with his family when he was six. After graduating from Hollywood High School he worked at various jobs until 1942, then joined the Coast Guard following the outbreak of World War II. Attached to the Marine Corps, he saw three years of combat duty in the Asia-Pacific area as a line officer in charge of a landing barge unit. "I made the first invasion in the Pacific, at Makin Island," he recalled. This was the hard-won battle portrayed in the 1944 movie *Gung Ho!* Before the war was over, Kelley took the Marines on 14 invasions.

Kelley said that "the start of my film career began in the camera department of the Technicolor Motion Picture Company in 1945. My tenure with Technicolor was eight years. I figured it was time to move on then. I got a job as an assistant cameraman at Paramount in 1952, and that got me going in the feature film business."

He worked on many Paramount pictures during the next 3 1/2 years, including the Western classic *Shane*, which won an Oscar for his boss, Loyal Griggs, ASC. He also returned to the South Pacific with Twentieth Century-Fox's *Bird of Paradise* company. In 1956 he joined the Disney studio in Burbank, where he was employed for eight years. "It was a real pleasure working there," according to Kelley. "Walt was such a meticulous man, and his research department always spelled out every detail." Among his Disney features and TV series were *Davy Crockett*, *Zorro*, *Tonka*, *Darby O'Gill and the Little People*, *Johnny Tremaine*, and *The Great Locomotive Chase*. He also worked on a number of pioneering one-hour TV series at Warner Bros., including *Cheyenne*, *Bronco*, *Hawaiian Eye*, and *77 Sunset Strip*.

Between 1965 and 1967 Kelley flew more than 150,000 miles photographing the *Shell's Wonderful World of Golf* series each February, March and April. During the rest of that time he was a director of photography on features and television, including two features for Universal, *Tammy* and *Laredo*. A rigorous TV regimen began at Twentieth Century-Fox in 1966 with 68 episodes of *Felony Squad* (starring Howard Duff and Ben Alexander), followed by *The Green Hornet* (featuring Bruce Lee), 28 segments of *The Ghost and Mrs. Muir*, and the feature pilot *Dick and Jane*. Assignments for Paramount TV included 46 *Petrocelli* shows filmed in Tucson, eight *Archer* episodes, the pilot and 36 chapters of *Happy Days*, and the feature pilot *Three-Way Love*. He photographed eight *Tabitha* shows with Robert Urich for Columbia TV. For Universal TV he filmed seven of the 90-minute *The Name of the Game* specials, episodes of *The Psychiatrist* and *The Sixth Sense*, and *Los Angeles 2017*, a movie of the week directed by Steven Spielberg. Other MOWs and pilots included the Robin Hood comedy *When Things Were Rotten* for Mel Brooks, *Lady of the House* with Dyan Cannon, and *How to Break Up a Happy Divorce* with Barbara Eden.

In 1973 Kelley photographed the Monsanto travelogue *Magic Carpet 'Round the World*, which took him to 25 countries in 60 days. The film became a staple at Walt Disney World in Orlando, Florida. He described the job as "hectic," but added, "I never get tired of traveling. I like to meet people and see new places, and I happen to have the kind of job that takes me just about everywhere I want to go."

Kelley's feature credits also include *On a Dead Man's Chest* with Rod Taylor and Elke Sommer, *Maharlika* with Paul Burke, *Top of the Heap*, *Justin Morgan Had a Horse*, and *The Biscuit Eater*. He also directed second-unit photography for *Convoy*, directed by Sam Peckinpah; *Electra Glide in Blue*, starring Robert Blake and principally photographed by Conrad Hall, ASC; and *McQ*, starring John Wayne.

Kelley's hobbies included swimming, golf, tennis and still photography. He gave up skiing after breaking his leg on Mount Waterman.

One of his main career ambitions came true in 1968, when Kelley became a member of the ASC. "I always told myself that if the ASC would accept me as a member, then I really had arrived in Hollywood," he said. He proved a very active member, serving often on the Board of Directors and on the golf tournament and membership committees.

Kelley retired in February 1991 after four years on Lorimar's *Hogan Family* series. He is survived by his wife, Dolores; a son, Steven; a stepdaughter; two stepsons and three grandchildren. Services were held November 9 in the Little Church of the Flowers at Forest Lawn in Glendale, California.

At the request of his family, in lieu of flowers please send donations in his name to the ASC Educational Fund, c/o ASC, 1782 N. Orange Drive, Hollywood, CA 90028.

From the Clubhouse

Luciano Tovoli and Nancy Schreiber are the ASC's newest active members.

Tovoli was born near Siena, Tuscany, in 1936 and studied literature at the Pisa University and cinematography at the Centro Sperimentale di Cinematografia in Rome, where he met Nestor Almendros and, later, Vittorio Storaro, AIC, ASC.

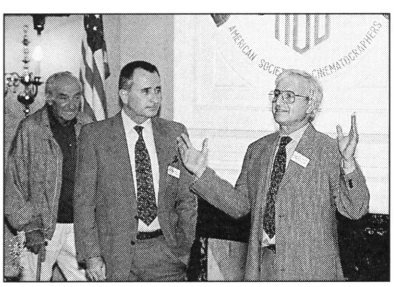
Just after film school he shot *Bandits of Orgosolo,* which earned him cinematographer status. Following that came *The Last Woman* and *Ciao, Maschio* for Marco Ferreri; *Bread and Chocolate* and *I Tulipani di Harlem* for Franco Brusati; *Il Deserto dei Tartari* for Valerio Zurlini; *Suspiria* and *Tenebrae* for Dario Argento; *Bianca* for Nanni Moretti; *The Passenger, Chung Kuo China,* and *The Mystery of Oberwald* for Michelangelo Antonioni; *The Italian Journey* for Andrej Tarkowsky; *Police* and *Nous ne Vieilleiros pas Ensemble* for Maurice Pialat; *Il Viaggio di Capitan Fracassa, Splendor, Che Ora E?,* and *Mario, Maria e Mario* for Ettore Scola; and *Reversal of Fortune, Single White Female,* and *Kiss of Death* for Barbet Schroeder. He recently completed filming Schroeder's *Before and After,* starring Meryl Streep and Liam Neeson.

From 1981 to 1987 Tovoli and friend Gabriele Lucci organized an annual international forum of cinematographers, who met in the medieval town of L'Aquila, near Rome. Three years ago he helped create IMAGO, the European Federation of Cinematographers, for which he has served as president for two years. He has also served as president of Italy's AIC.

Nancy Schreiber began her career as an electrician in New York in the Seventies and went on to found her own gaffing company before becoming a director of photography 13 years ago.

Schreiber's work was nominated for best cinematography at the IFP Spirit Awards in 1994 for the feature *Chain of Desire.* Other film credits include *Ladykiller, The Old Maid, Trapped, Farmer's Daughter, Fat Monroe, Twist of Fate, Household Gods, Interior Decorator from Hell, Kiss Me a Killer, Not Us, The Obit Writer, Soft Kill, The Phony Perfector,* and Showtime's *Lush Life* and *Missing Parents.*

Schreiber shot the high-definition video interview portions of *Visions of Light,* a documentary on the history of cinematography which showed at the Cannes, New York, Toronto, London, and Sundance film festivals, among others, and won awards for best documentary from the New York Film Critics and National Film Critics in 1994. Other documentary work includes Martin Scorsese's *100 Years of American Cinema*; PBS' Academy Award-nominated *Liberators*, about a WWII black battalion that liberated the prisoners at Buchenwald; three shows for the PBS series *The Creative Spirit; Through the Wire,* concerning women political prisoners in the U.S.; and the Academy Award-nominated *Promises to Keep,* about the homeless. She also served as director of photography on documentaries for *Frontline,* HBO, National Geographic *Explorer,* and others.



Her own documentaries, on which she served as producer, director and director of photography, have also been award-winners: *Possum Living* picked up a Filmex Special Merit Award and a Blue Ribbon at the American Film Festival, and *Rites of Passing* earned a Red Ribbon at the American Film Festival.

Schreiber has also taught and lectured at SUNY-Purchase, Columbia University, and the School of Visual Arts.

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On October 29th the ASC celebrated the installation of the Stephen Chamberlain book collection in the new library at the Clubhouse with a ceremony attended by many ASC members. As manager of corporate communications at Arriflex, Chamberlain, an associate member who died last year, served as liaison to the cinematographer community. The books, covering all aspects of moviemaking and film history, were given to the ASC by Arriflex.

ASC President Victor Kemper presented a speech dedicating the room to Chamberlain and read a letter from Sol Negrin, ASC, an old friend of Chamberlain's who could not attend. Kemper's remarks were followed by brief addresses from Stephen Burum, ASC, Woody Omens, ASC and Arriflex president and ASC associate member Volker Bahnemann.

The library was organized with the help of Allison Pinsler, formerly of the Margaret Herrick Library of the Academy of Motion Picture Arts and Sciences; Claire Kemper, who designed and decorated the space; and Marianne Davis and Liz Ruelas, who spent many hours arranging the books and entering book data.

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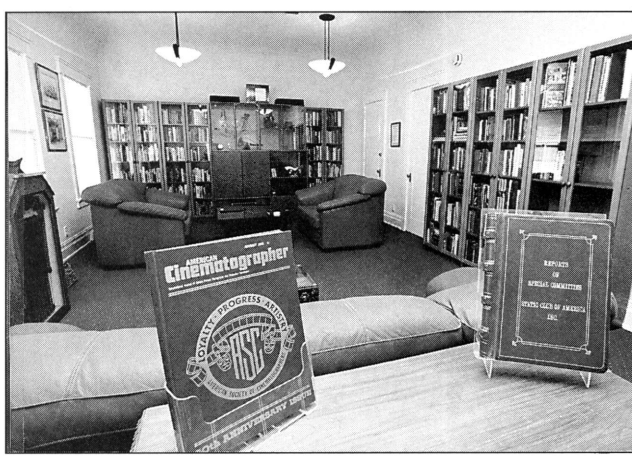
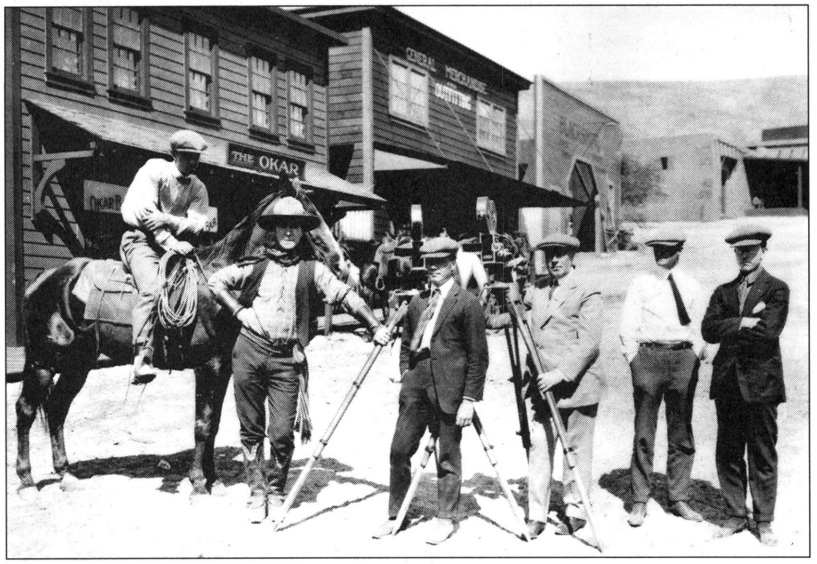
The Cinematographers Peer Group of the Board of Governors Election Board of the Academy of Television Arts and Sciences has announced that Gerald Perry Finnerman, ASC has been elected to serve for the 1995-1997 term. Richard Glouner, ASC continues to serve the 1994-1996 term.



Left: *Stanley Cortez, ASC (far left) and Arriflex president and ASC associate member Volker Bahnemann listen to ASC President Victor Kemper's dedication of the new ASC library.*
Below: *the new room.*



There was smoke aplenty on the dusty western street at William S. Hart's Newhall ranch during the early 1920s. The set typifies the pictures produced by and starring the austere Hart, who made an effort to dramatize the Old West in realistic terms. Here is Hart in his familiar peaked hat standing between his favorite director, Lambert Hillyer (aboard the cayuse) and his favorite camera artist, Joseph August, ASC.

August, a charter member of the ASC, was called a "first cameraman" in the silent days; today he'd be the director of photography. He and Charles Rosher were the first men to have the initials ASC follow their names in film titles. Standing next to him is an unidentified second cameraman. His duty was to duplicate as nearly as possible the shots done by the first camera. Both cameras here are the latest and best, Bell & Howells. The second negative was sent to Europe where the foreign language prints were made and titled. One reason for this was the considerable savings in shipping and import duties by sending one negative instead of many prints.

Standing at right are the assistant cameramen (one for each camera). We haven't identified the one in the white shirt, but the other is Victor Milner, ASC. Milner had become a first cameraman in 1914 and we don't know why he was working as an assistant in this instance. He was noted as a newsreel cameraman and documentary filmmaker and later became a cinematographer at Paramount, where the films he photographed included eight Cecil B. DeMille spectaculars.

The last and greatest of the Hart and August collaborations was *Tumbleweeds,* produced by Hart and directed by King Baggot. Their 1925 reenactment of the astonishing Cherokee Strip landrush of 1889 utilized nearly 1,000 men, over 1,000 horses and 300 wagons. Nineteen cameras, mostly Akeley "pancakes," caught the action at La Agoura Rancho and the sequence is a masterpiece of swirling dust and mass action. It was staged and cut together as rhythmically as an Eisenstein "montage" well before any Soviet films had been shown in America.

A great financial loss incurred by *Tumbleweeds,* failing eyesight, and the overshadowing popularity of more flamboyant cowboy stars brought about Hart's retirement. August's career continued to flourish and a few of the resulting jewels were *Black Moon, The Informer, Gunga Din, The Hunchback of Notre Dame, Man of Conquest,* and *All That Money Can Buy.* He was nominated posthumously for an Academy Award for his last picture, *Portrait of Jennie,* in 1948.

— George Turner

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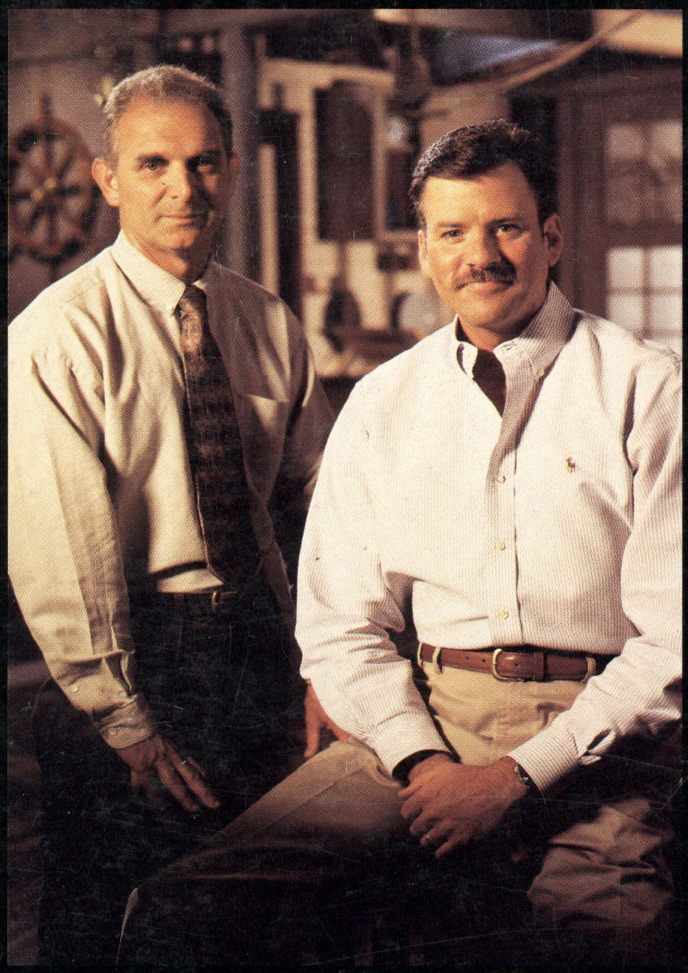

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